DOCUMENT RESUME

ED 145 097 08 CE 012 263

TITLE	Implementing Career Education. Exemplary Practices in California Public Schools.
INSTITUTION	California State Dept. of Education, Sacramento.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C.
PUB DATE	77
NOTE	71p.
AVAILABLE FROM	Publications Sales, California State Department of Education, P.O. Box 271, Sacramento, California 95802 ($0.65, plus 6% sales tax for California residents)
EDRS PRICE	MF-$0.83 Plus Postage. HC Not Available from EDRS.
DESCRIPTORS	*Career Education; *Career Exploration; Community Involvement; Curriculum Development; Curriculum Planning; *Demonstration Projects; Elementary Secondary Education; Guidance Services; Inservice Teacher Education; Instructional Materials Centers; Program Administration; *Program Descriptions; Program Development; Program Evaluation; Program Planning; *Program Validation; Senior High Schools; Simulation; Staff Improvement; Teaching Methods
IDENTIFIERS	*California

ABSTRACT

The collection of California's exemplary practices in career education included in this document was chosen because each one illustrates an exemplary practice in a specific aspect of career education. It is also noted that each practice has demonstrated effectiveness and each can be replicated without unusual additional resources. Following the first two chapters, which discuss career education in general (definitions, basic concepts, common misunderstandings, change strategies, and concerns for the future) and career education in California (report of the Commission for Reform of Intermediate and Secondary Education (RISE), goal statements and career clusters), each of the remaining chapters discusses and describes exemplary practices/projects in one of the following areas: planning, management, staff development, curriculum development, instructional services, guidance services, community involvement, and evaluation. (SH)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED145097

Implementing Career Education

Exemplary Practices
in California Public Schools

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL BY MICROFICHE ONLY HAS BEEN GRANTED BY

M Batts

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND THE ERIC SYSTEM CONTRACTORS."

Prepared under the direction of the

Vocational and Career Education Services Section
Career Education Unit

California State Department of Education
Wilson Riles, Superintendent of Public Instruction
Sacramento 1977

CE 012 263

Credits

This publication, which was prepared under the direction of the Vocational and Career Education Services Section of the California State Department of Education, was published by the Department, 721 Capitol Mall, Sacramento, CA 95814. Special acknowledgment is extended to the following units and individuals for their help in producing the document: the many school districts and individuals that prepared the reports from which this publication was developed; the Office of Information/Program Dissemination for directing the writing and preparation of the final document; Rosie Levy for writing the manuscript; Cheryl Shawver for preparing the illustrations; the Bureau of Publications for preparing the camera-ready copy; and the Office of State Printing for printing the document.

The activity which is the subject of this report was supported by the U.S. Office of Education, Department of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred.

The publication was distributed in 1977 under the provisions of the Library Distribution Act.

For more information about any of the current education activities described in this publication, write to the Vocational Education Research Information Center (VERIC), 1025 P Street, Sacramento, CA 95814. Please specify the particular activity you would like to know more about. The original reports submitted by the school districts and adapted for this publication have been placed in VERIC.

Price of Publication

Copies of this publication are available for 65 cents each, plus 6 percent sales tax for California residents, from Publications Sales, California State Department of Education, P.O. Box 271, Sacramento, CA 95802. A list of other publications that are available from the Department may be obtained by writing to the same address.

Additional information about Department publications may be found on page iv of this publication.

Preface

This publication is a collection of exemplary practices in career education drawn from school districts throughout California. These practices are but a sampling of the many career education activities taking place in California public schools. They were chosen because each one illustrates an exemplary practice in some aspect of career education, such as planning, management, staff development, curriculum development, instruction, guidance, community involvement, or evaluation.

Each exemplary practice has demonstrated effectiveness, and each can be replicated without unusual additional resources. Therefore, it is hoped that other districts seeking to implement career education can benefit from the successful experiences described in this publication.

WILLIAM E. WEBSTER
Deputy Superintendent
for Programs

RICHARD S. NELSON
Administrator, Vocational
and Career Education
Services Section

REX FORTUNE
Associate Superintendent
for Secondary Education Programs

PAUL N. PETERS
Manager, Career Education Unit

Other Career Education Publications of the California State Department of Education

Career Education: A Position Paper on Career Development and Preparation in California (1974) $.65
Career Education Microfiche Collection Catalog (1975) $.65
Implementing Career Education: An Administrator's Handbook (1976) $.65
Implementing Career Education: Community Involvement (1977) $.65
Implementing Career Education: Concept and Process (1977) $.65
Implementing Career Education: Instructional Strategies Guide for Kindergarten Through Grade Twelve (1977) $.65
Implementing Career Education: Nine Model Practices (1976) $.65
Sources of Information on Career Education: An Annotated Bibliography (1975) $.65

Purchasers in California must add 6 percent sales tax to the prices listed.

For a list of Department publications with prices and ordering information, write to the California State Department of Education, P.O. Box 271, Sacramento, CA 95802, requesting *Selected Publications of the California State Department of Education* (revised and published semiannually by the Bureau of Publications).

Contents

Preface iii

Overview 1

Chapter 1 Career Education: What Is It? 4

Definitions of Career Education 4
Basic Concepts 5
Common Misunderstandings 5
Career Education Today 6
Strategies for Change 7
Concerns for the Future 9

Chapter 2 Career Education in California 10

Report of the RISE Commission 10
Goal Statements for Career Education 10
Career Clusters 11

Chapter 3 Exemplary Practices–Planning 12

Revamped Curriculum to Include Career Education; Reform in a Rural School District 12
Performance Contracts for Teachers in an Urban Comprehensive High School 13
Planning for Career Education; Essential Ingredients 17
Plans for Career Education in Los Angeles; Goal to Provide Services for All Students 18
Suburban High School Ready for Career Education; Students, Parents Involved . . . 19

Chapter 4 Exemplary Practices–Management 20

A System for Management and Evaluation; Steps for Implementing the System . . . 20
Steps for Implementing Career Education 21

Chapter 5 Exemplary Practices–Staff Development 22

Stull Act Used to Promote Careeer Education; Career Objectives Included in Annual Plans 22
Ceres Inservice Model; A Full-Blown Approach to Staff Development 23

Chapter 6 Exemplary Practices–Curriculum Development 24

Curriculum Development in Covina-Valley; Performance Contracts for Accountability 24
San Diego Students Given a Career Education CHOICE; Learning Units Created . . . 25
Model Infusion Unit Developed by Consortium; Career Education Integrated into Curriculum 26

Career Education Developed in Adult School; Life Roles and Career Changes Stressed . . . 27
Learning Centers Made from Boxes; Task Cards, Worksheets, Games Used . . . 28
Task Cards Used to Teach Career Education; Minimum Teacher Preparation Required . . . 29
Career-Oriented Curriculum for Handicapped; Students Helped to Become Self-Sufficient . . . 29

Chapter 7 Exemplary Practices–Instructional Services . . . 35

Instruction, Guidance, and Community Exploration; Parochial Schools Included . . . 35
Reality Land: Role Playing in Ceres; Program Different in Each Class . . . 37
Simutown in Ontario-Montclair; Focus on Banking, Business, Civil Organization . . . 38
Puppets Used for Self-Awareness Activities in Covina-Valley . . . 38
House Built in Chaffey; Responsibility Shared . . . 40
Media Center: Students Learning as Presses Roll; Career Education Materials Produced . . . 41
Career Center on Wheels; Minivan Used in Vast San Bernardino County . . . 41

Chapter 8 Exemplary Practices–Guidance Services . . . 43

Career Centers: A Basic Career Education Tool; as Different as a General Store and a Supermarket . . . 43
Teachers, Counselors, Parents Talking Same Language; Student Self-Esteem Increased. 44
Homeroom: A Good Spot for Career Education; All Students Reached . . . 45
Career Planning Course for Ninth Graders; Interests and Aptitudes Identified . . . 46
"Common Denominators" for Career Guidance; Competencies Specified at Irvine . . . 46
Career Development Plan in San Bernardino; Students Guided in Grade Nine . . . 48
Occupational Planning Sheets in Santa Barbara . . . 49
Help for Undecided College-Bound Seniors; Cooperative Program in Covina-Valley . . . 49
Career Planning Centers in Rancho Santiago; Life-Style Recognized as Important . . . 51
Computer Assistance in Monterey; Individual Characteristics Matched . . . 51
Counselor Aides Used in Los Angeles; Peer Identification Provided . . . 52
Career Guidance for Adults in San Bernardino; Center Open in the Evening . . . 53

Chapter 9 Exemplary Practices–Community Involvement . . . 54

Businesses Visited by Teachers and Counselors in Los Angeles . . . 54
Coordination of Services in Contra Costa County; Counseling by "Outside" Professionals . . . 55
Certificate of Competency in Los Angeles "Reality-Based" Training Program . . . 56
Volunteers to Implement RISE Report in a Santa Barbara Junior High . . . 56
Industry-Education Councils Promote Learning; Statewide Effort to Validate Curriculum . . . 57
Career Expo: Does the Carnival Approach Work? Different Approach Successful . . . 58

Chapter 10 Exemplary Practices–Evaluation . . . 60

Career Tests Evaluated in Regional Center Created by Legislature . . . 60
Criterion-Referenced Test Used to Measure Career Awareness in San Bernardino . . . 62
Student Gains Confirmed by Learning Assessment System in Ceres . . . 62
Evaluation Aided by Private Third Parties . . . 63

Acknowledgments . . . 64

Overview

"Few educational ideas have gained such wide acceptance in American education as career education. It's tremendously impressive how far it has gone in the five years since it has had a name. Business, industry, labor, and parents have rallied around it with awesome unanimity." This assessment of the current status of career education was made by the man who gave career education its name—Sidney P. Marland, former Assistant Secretary for Education, U.S. Department of Health, Education, and Welfare, and former U.S. Commissioner of Education. Dr. Marland now serves as President of the College Entrance Examination Board.)

Dr. Marland's view of career education is not just that of a proud father. It is shared by the first official national survey of career education conducted by the American Institutes for Research (AIR) for the U.S. Office of Education (USOE) and the National Advisory Council on Career Education.

"Career education as a concept has found ready acceptance within the nation's schools," AIR says. "The rate of its adoption has been remarkable. The tremendous array and variety of career education activities . . . being provided to students in those schools where career education has been tried out attest to the viability and usefulness of the 'career education' concept."

The AIR survey of a representative sample of 900 school districts in 1974-75 shows that "the nation has moved about 15 percent of the way toward the goal of comprehensive career education for all young people." AIR admits that this is a "rough estimate," partly because of the difficulty of distinguishing career education activities from traditional school practices. Using a list of 15 learning activities associated with career education, AIR found that 52 percent of the nation's school districts had "broadly implemented" at least one of the 15 activities. Twenty-one percent of the districts were using more than half of the activities, but only 3 percent had implemented all 15.

One of the most important steps in establishing career education is staff development. AIR found that 57 percent of the nation's school districts, serving 69 percent of the nation's students, were carrying on staff development activities in at least one of five areas in 1975. The five topics are career education concepts, teaching techniques, curriculum materials, evaluation techniques, and community resources. In these schools 33 percent of all teachers and more than 60 percent of the counseling staff were involved.

The decision to involve the staff in inservice training activities was the most frequent step being taken to implement career education during 1975, AIR learned. And it found a "significantly positive" correlation between staff development and the appearance of career education in the classroom.

After looking at the results of the AIR survey, released in mid-1976, the National Advisory Council on Career Education concluded that "the key to advancing career education at the local level may lie in enlisting the aid and support of community

members." AIR found that the importance of community involvement has been recognized in virtually all career education programs and that specific steps have been taken to ensure at least partial involvement.

"Increased community involvement emerged as an essential component of successful career education programs," AIR says. "Levels of career education activity were higher where representatives of the business, labor, and industrial community were involved. Also, the activities most frequently reported as effective in helping young people learn about and prepare for work all involved bringing students together with work world representatives in one way or another."

Eighty-five percent of the nation's students were in school districts that used people from business, labor, industry, and government as a resource in the instructional program, AIR found. Fifty-nine percent were in districts where students, teachers, parents, and members of the business, labor, and industrial community were involved in educational policymaking. This involvement of representatives from the world of work is the best indication that a district is providing at least some career education, AIR says. Of course, many school districts have traditionally tried to use the community in the schools. However, AIR says that the career education movement is building on the existing practices and is increasing this contact between schools and communities.

Another good indication of career education activity is the existence of a formal career education policy statement, AIR says. It found that 27 percent of the nation's school districts had a formal written policy in 1975 or were planning to adopt one. Eighteen percent had at least one full-time staff member to manage career education, and 34 percent had staff assigned to career education at least part of the time.

School districts told AIR that the most critical factor in starting career education and in continuing it was funding. AIR estimates that $31.5 million was allocated to career education in 1974-75 in 860 districts serving 16.7 million students. Districts reported that 40 percent of these funds were from state sources, 37 percent from local school budgets, 22 percent from the federal government, and 1 percent from other sources.

During its early years career education was primarily confined to innovative, exemplary projects. These were funded to a great extent by the Vocational Education Amendments of 1968, AIR says. AIR suggests that many school districts now feel that no more "demonstration funding" is needed. "Sufficient projects now exist throughout the country," one local career education coordinator wrote. He said that career education proponents should "focus on getting money for career education through to the state level and the local communities for use according to a defined state and local plan."

Several aspects of career education efforts have become particularly popular and successful, AIR says. One of these is the career center, where students can go for career information, testing, and specific help from counselors. "Career centers were highly valued in the districts that had them," AIR says. "They were usually well liked by students, since attendance was often voluntary, and the materials and equipment were easy to use and modern." Other popular, successful activities include work experience programs, which expose students to the realities of the world of work, and the use of people from the community as speakers.

Career education was stronger in school districts which had received assistance from their state department of education, AIR found. It praises the states for exercising leadership in career education since 1971, although it adds that much remains to be done.

The survey found that 42 states have a formal, written career education policy. Twenty-eight have a full-time staff for career education, and 18 have established a career education advisory committee.

Looking at other important aspects of career education, AIR found that:

- Teacher-training institutions have not yet been very active in preparing teachers to use the concept of career education in their teaching. With few exceptions, schools of education have been allocating less than 7 percent of their teacher-training budgets to career education. However, career education is being actively discussed in most schools of education.
- Many evaluations of career education have been superficial. Only rare instances have occurred where alumni are studied to find out what effect their school experience had on their work experience. The national council says that there is a need for evaluations of both the short-term and long-term effectiveness of career education.
- Career education is most popular in large school districts, although it is found in equal

measure all over the nation. There is almost no difference in the amount of career education found in affluent districts in comparison with economically disadvantaged districts.

- Although thousands of pieces of career education instructional materials have been commercially produced, school staffs seemed to prefer locally developed materials. A major activity for local school staff was the development of materials.

"Career education is now permeating educational program thinking throughout the nation," AIR says. It points out the significance of the fact that career education "is still of concern in a field where fads have often erupted with brilliant oratorical support and then quietly faded away."

Only 1 percent of the nation's school districts have considered implementing career education and then rejected the idea, AIR says. It notes that the critics are "vastly outnumbered" by the supporters of the concept. Although many school districts are watching and waiting to see if career education "really works," many others are moving ahead. Career education is beginning to have "a visible impact on schools across the country," AIR says.

(Copies of the AIR report, *Career Education in the Public Schools, 1974-75: A National Survey,* may be obtained free from the U.S. Office of Education, Publications Distribution, Room B-041, 400 Maryland Ave., SW, Washington, DC 20202.)

Chapter 1

Career Education: What Is It?

Just what is career education? Ever since that day in 1971 when Sidney P. Marland, then U.S. Commissioner of Education, made career education his top priority, educators and others have been running around in ever-decreasing circles, trying to define it.

Although Dr. Marland said specifically many times that he did not want to "lay out a concrete federal definition of career education," the clamor for a definition continued. Dr. Marland's reluctance to define the concept was based on the belief that "if the notion has merit," it must be defined jointly by teachers, counselors, school board members, college faculties, superintendents, parents, and students. He felt the definition should vary according to the different needs of different communities and states.

Kenneth B. Hoyt, Director of the Office of Career Education(USOE), still believes that "career education defies a simple definition and so will remain confusing in meaning to many."

Ironically, in the controversy over having no definition, career education probably inherited more definitions than did any other movement in education's history. A look at some of these definitions shows that the whole controversy was really a tempest in a teapot because, although the words may vary, the concept underlying them all is basically the same.

Definitions of Career Education

Here are a few of the definitions of career education:

- According to Dr. Marland—"Career education is designed to give every youngster a genuine choice, as well as the intellectual and occupational skills necessary to back it up. Career education is not merely a substitute for 'vocational education' or 'general education' or 'college-preparatory education.' Rather, it is a blending of all three into an entirely new curriculum."
- According to the Career Education Unit, California State Department of Education—"Career education is a comprehensive educational thrust that affects instruction at all grade levels and in all subject matter disciplines. Career education seeks to blend the development of academic skills, leisure skills, and vocational skills."
- According to the Maryland State Board of Education—"Career education is the total effort of public education and the community aimed at helping all individuals to become familiar with the values of a work-oriented society, to integrate these values into their personal value systems, and to implement these values in their lives in such a way that work becomes possible, meaningful, and satisfying to each individual."
- According to USOE in a 1975 "policy paper" on the subject—"Career education is the totality of experience through which one learns about and prepares to engage in work as part of her or his way of living." (This definition has been endorsed by the National Advisory Council for Career Education.)
- According to the San Diego City Unified School District—"Career education is a comprehensive blending of academic and occupational education into a new curriculum approach which better prepares all students in all schools for productive citizenry."

All of these definitions stress one most important point very clearly. Career education is in no way another little program or innovation to be tacked onto the curriculum. As Dr. Hoyt says, career education is not a "temporary accommodation to a series of current, short-range problems." Career education is now, and was always intended to be, a basic reform that would reshape the country's educational system. "As a basic reform movement," Dr. Hoyt says, "career education aims

at accomplishing permanent change in the fabric, structure, and operation of American education."

This philosophy of reform ties in directly to a key factor in career education—infusion. If career education is not to be an addition to the curriculum, then career education concepts must be infused or incorporated into the day-to-day instructional and guidance activities in schools. For example, a teacher presenting a unit on Mark Twain might incorporate a study of Twain's occupations, and an English teacher could help students see the need for English by relating it to journalism, communications, and stenography.

Basic Concepts

Looking at various definitions of career education, one finds four common threads:

1. A comprehensive career education approach can make all subject areas more meaningful and relevant to students by making students aware of career possibilities and allowing them to explore these possibilities and prepare for ones of their choice. At the same time students should graduate from high school with a salable skill and with the knowledge to pursue academic studies if they wish to do so.
2. Career education is oriented to guidance and to the development of every student's self-awareness and ability to make decisions, including development of healthy attitudes about work, education, and leisure-time activities.
3. Career education is dependent on developing genuine partnerships with the academic and vocational aspects of schooling, parents, business and industry, the community, counselors, and all educators from kindergarten through the university. It seeks to involve the whole community in education as it has never been involved before.
4. Career education stresses individualizing education and offering learning options in a flexible format that allows students to move back and forth between the world of education and the world of work, even as an adult.

"Career education seeks to blend academic, vocational, and leisure skills in order to give students the kinds of educational experiences that can prepare them for personal fulfillment and economic independence," says Paul N. Peters, Manager of the Career Education Unit, California State Department of Education. "It provides students with the opportunity to develop an awareness of their own potential, a sense of dignity and pride in accomplishment, and the confidence to pursue personal goals."

"We must prepare people to choose, knowing that one kind of activity will give them more satisfaction than another," says William F. Pierce, Deputy Commissioner for Occupational and Adult Education, USOE.

Common Misunderstandings

If it is important to know what career education is, it is just as important to know what it is not. Even though career education has been going strong for more than five years, some confusion and misunderstanding remain. Some people who do not understand career education feel threatened by it and speak out against it. However, career education proponents report that these persons are modifying their views as they see career education in operation and come to understand what it is all about.

Clarifications of common misunderstandings, as described by Ronald Detrick, Director of Career Education, San Diego City Unified School District, are presented as follows:

1. Career education is *not* just another name for vocational education but is rather a new, integrated approach to merging occupational awareness and preparation into the main-

stream of the education process. Career education recognizes that one, but only one, of the goals of "comprehensive" education is to enable students to become economically self-sufficient.

2. Career education does *not* detract from academic education. Rather, it supplements and supports academic training. Career education refutes the belief that students must receive either academic or vocational instruction and establishes the principle that a total educational system can and should accomplish both objectives.
3. Career education does *not* compete with instruction that prepares a student for college. Instead, career education helps the student to find a direction, a practical reason for continuing education beyond high school. Again, this idea is not contrary to the humanistic goals of a liberal education; it merely recognizes that people must learn how to earn a living as well as how to live. Many students will need financial support to realize their educational goals; many will want to experience the practical application of their classroom instruction. Above all, most of our students either do not enter college or will not complete a four-year college program if they do begin it. For these students meaningful alternatives must be provided.
4. Career education is *not* intended, in any way, to discourage disadvantaged students from achieving higher levels of educational attainment. On the contrary, career education can be a strong motivating force for self-realization and for the achievement of economic independence. It can open new frontiers of career possibilities, particularly for disadvantaged students.

Perhaps the greatest misunderstanding about career education that still persists is that it is anti-intellectual. For example, in a May, 1976, address to the Education Commission of the States (ECS), Ewald Nyquist, Commissioner of Education, New York State Education Department, complained that "the 'new vocationalism' that is so much in vogue today may help students to get their first job after high school or college, but it is not going to provide them with enduring satisfactions throughout life. This is the reason why career education must be combined with a renaissance of the liberal arts." Dr. Nyquist said that education has two purposes: "One is to help each person to earn his bread; and the other is to make each mouthful sweeter."

Career education has exactly those same goals. In 1972 Sidney P. Marland told the critics that "we have no intention of turning any budding Langston Hughes into a machinist, but then neither do we intend to deny any machinist an appreciation of Langston Hughes' verse. Indeed, we think they should appreciate each other," Dr. Marland said, "and in that mutual understanding begin to build a new universe of respect in which all talents, all skills, and all kinds of intellectual preparation and training are understood for the important places they individually hold in our complex and interdependent society. That is the heart of the career education idea, which some of our critics fail to see." In fact, one of the 15 job clusters developed by USOE for use in career education is fine arts and humanities.

Career Education Today

Although some still debate career education, many state educational agencies and school districts have moved well past talking to doing and are implementing career education. A 1974 survey showed that more than 5,000 of the nation's 17,000 school districts had formally brought career education into their schools.

Fourteen states had passed career education legislation as of mid-1976, according to ECS, and 55 of the 57 states and territories have appointed career education coordinators. It is estimated that more than 2.5 million elementary school students (16 percent of the total) have been exposed to career education, according to ECS, and at least 45,000 secondary school teachers (8 percent of the total) have received inservice training in career education.

Practically every major educational organization and other important groups like the U.S. Chamber of Commerce have endorsed career education, ECS says. Policy statements on career education have been adopted by USOE, most of the states, and many school districts, colleges, and universities. An increasing number of teacher training institutions are starting to offer courses in career education.

Looking at how career education has grown in five years, ECS concludes that it has "moved quickly and pervasively into a position of prominence in this country." In addition, it finds that "more people are engaging in leadership roles; more dollars are being made available; and more resources are being developed for use in career education."

Federal resources for career education have come from three main sources. The first is the Vocational Education Amendments of 1968 (Public Law 90-576), which funded research and development activities under Part C, and exemplary or demonstration projects under Part D. This law was particularly important before career education received legislative status. Approximately 700,000 students were affected by these state programs in 1971-72, ECS says. Other exemplary projects were funded under Title III, the innovative programs section of the Elementary and Secondary Education Act (ESEA).

Career education was officially endorsed by Congress when it revised ESEA by means of the Education Amendments of 1974 (Public Law 93-380). Section 406 of that law established USOE's Office of Career Education and the National Advisory Council for Career Education. It also provided a $10 million annual allocation to support career education efforts. In an unusual show of support, Congress matched the allocation with an appropriation in the 1976 fiscal year. As it revises existing legislation, Congress is expected to continue its strong backing of career education.

Strategies for Change

As career education has evolved, it has adopted a number of strategies for attaining change, including the infusion approach. Eleven of these strategies have been identified by Dr. Hoyt in connection with his role as the national spokesman for career education. He gives this advice on strategies to state agencies and school districts:

1. *Use public opinion polls and research data illustrating current youth problems and societal need as a rationale for reform.* Such data are in plentiful supply. They clearly indicate a desire on the part of youth, parents, business, labor, industry, and the general public for education to increase its emphasis on education as preparation for work. Both the need and the call for this approach to educational reform are clear and strong. This strategy has, hopefully, made clear that career education is more than a fad which will soon disappear by emphasizing the *growing* problems associated with education and work relationships that are certain to increase in the years ahead.
2. *Emphasize the systemwide need for career education.* The career education concept has been intentionally pictured in ways that apply to education at every level, in every state, in every educational institution, and to every educator. Although the nature and degree of reform will obviously vary, no part of American education can remain untouched if reform of the system is to be accomplished.
3. *Use an infusion approach to reform.* Real reform cannot be attained through a strategy of additions that leave the rest of the system as is. Thus, the proponents of career education have not asked that it become a new educational specialty, a new part of the curriculum, or a new program requiring extensive additions of space and new staff members. Instead, the strategy has been to reform educators and educational programs by infusing a conscious emphasis on education as preparation for work throughout the entire system of formal education.
4. *Don't try to take over all of education.* There is a huge difference between emphasizing that education, as preparation for work, represents a goal applicable to *all* educators and claiming this to be the *only* goal of education. In championing its particular goal, the proponents of career education have purposely sought to avoid demeaning or detracting from other worthy goals of education. Rather, they have sought, as part of reform, to instill a sense of purpose among all persons—teachers and students alike—in ways that will emphasize the multiple goals of American education.
5. *Emphasize* work, *but do so in humanistic terms.* If career education is to represent a viable response to those calling for educational reform, it must center its conceptual efforts on *work.* If career education is to appeal to today's educators, it must be presented in humanistic form. Rather than viewing this task as insolvable, proponents of career education have attempted to redefine work in humanistic terms related to the need of all human beings to act, to accomplish, to produce, to achieve. This effort has allowed unpaid work, as well as the entire world of paid employment, to be included in the career education concept. Moreover, it has allowed all educators multiple ways of relating work to their substantive instructional content.

6. *Organize career education efforts around the process of career development.* Career development, as part of human growth and development, covers the entire life span, from preschool through retirement. Moreover, it encompasses *all* persons. Finally, it is based in a combination of philosophy and research that emphasizes freedom of choice for the individual. It is the most logical of all possible ways of viewing the total spectrum of education and work relationships.
7. *Implement career education primarily around the teaching and learning process.* Until classroom teachers change their approach to the process of teaching and learning, no basic reform can be made in American education. The proponents of career education have avoided an approach that asks teachers to add more content to an already overcrowded curriculum. Instead, they have centered attention on the teacher's primary responsibility—that is, the imparting of substantive content—and have asked: How can the total resources of the community be brought to bear on helping students learn more? and How can the substantive content you teach be related to work?

The essential strategy used in career education is one of attempting to reduce worker alienation, on the part of both teachers and students, by increasing the personal autonomy of the teacher, expanding the variety of learning approaches and learning resources available to the teacher, and recognizing that both teachers and students are more creative, innovative, and dedicated than the "educational assembly line" has given them credit for being. It is a strategy which, when understood by teachers, appears to work.

8. *Allow teachers the time and the opportunity to be creative.* The proponents of career education have sought neither to provide teachers with packaged approaches to career education nor to force them to use a career education approach. Rather than invest heavily in new specialists or new materials, they have made their primary investment in providing teachers with the time to think critically and constructively about how career education can help each teacher better attain his or her objectives. Teachers do not have "spare" time. Change—real change—will not come to the classroom if ordered by the administration. Teachers need the time and the opportunity to make their own professional decisions. They are capable of doing so.
9. ***Allow teachers to "sell" themselves on career education.*** **Career education subscribes to the "15-70-15" philosophy that says about 15 percent of teachers will become enthusiastic almost immediately, about 15 percent will reject any new ideas forever, and the remaining 70 percent will remain as professional skeptics until they**

have been given time to think it through for themselves. Career education has sought to capitalize on the 15 percent who are enthusiastic supporters and to use them as the primary role models for helping the 70 percent become similarly enthusiastic. The kinds of change that are sought will not come rapidly.

10. *Provide key roles in career education for all professionals in education.* It is hard to be opposed to something if you are a vital part of it. Key roles in career education have been outlined for classroom teachers, counselors, school administrators, media specialists, and all other professional educators. Each is being asked to change, as part of the reform attempt, in ways that emphasize helping teachers better serve students. There is no part of American education that is not being asked to change.
11. *Recognize the importance of collaboration.* Educational reform cannot be accomplished if the only motivation to change is from the inside. Moreover, an essential element in the kind of reform advocated through career education is the greater use of the entire community as a learning resource—an abandonment of the false notion that the best way to prepare students for work is to lock them up in a schoolhouse and keep them away from work. Thus, from the outset the proponents of career education have said that this reform is not something educators can do by themselves. Instead, career education is a collaborative effort involving the formal education system; business, labor, industry, and the professions; and the home and family structure. Collaboration by all three of these segments of society is essential to the kind of reform envisioned by career education.

"Collectively," Dr. Hoyt says, "these 11 strategies hold high potential for educational reform in America."

Concerns for the Future

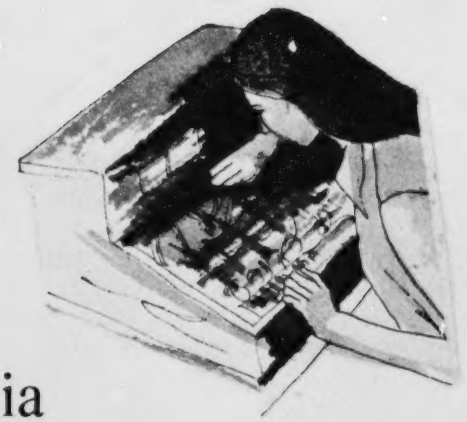
Of course, all is not smooth sailing, and career education has its share of problems. Because money is always a problem these days, some career educators complain that they don't have enough money and that career education costs too much. Ironically, others say that career education costs so little that it may be considered low in priority.

ECS believes that there are several concerns which must be actively addressed by career educators if the concept of career education is to remain viable:

- A lack of consensus on the role and responsibilities of schools and colleges
- A lack of consensus on an operational definition of career education and a lack of understanding of the concept
- Continued compartmentalization of work and education as separate activities
- Federal funding that has focused on planning and demonstration projects rather than on comprehensive developmental programs
- Overlapping and redundant federal legislation
- A continuing need in schools and colleges for staff development in career education
- Vagueness about the scope of career education, particularly as it relates to early childhood education and adult education
- Incomplete use of community resources
- Constraints of the insurance, compensation, labor, and related laws and regulations

Nevertheless, career education survives and thrives. As USOE has said, career education has "demonstrated its acceptability as a direction for change to both educators and to the general public."

Career education looks ahead toward a somewhat different goal. If career education is successful, "the result should be complete integration of career education concepts into the total fabric of all American education," USOE says. "When this has been accomplished, the result should be the abandonment of the term *career education.*" Career education will succeed completely when it no longer needs to exist.



Chapter 2

Career Education in California

California got in on the ground floor in career education. The California State Department of Education gave career education priority status in 1971, the same year in which Sidney P. Marland, then U.S. Commissioner of Education, established career education as a national priority.

The Department and the State Board of Education recognized that the traditionally designed and operated school systems were not functionally effective for all students. California schools, as well as those in the nation as a whole, were primarily concerned with preparing students to enter the next level of education and doing little to help students make the transition from school to the labor market.

In the years that followed, school districts in the state have come up with a variety of innovative efforts in career education. They have found guidance and tangible help in all aspects of career education from the Department of Education's Career Education Task Force and Career Education Unit, Vocational and Career Education Services Section.

Report of the RISE Commission

Although career education in California is going well, it is on the threshold of even bigger things because career education is tied in closely to a state plan to reform intermediate and secondary education. The *Report of the California Commission for Reform of Intermediate and Secondary Education* (RISE) speaks to many of the points made by career educators (Sacramento: California State Department of Education, 1975).

In its statement of philosophy, the RISE commission listed ten characteristics that every educated adult should have. Three of these characteristics relate directly to career education. The first characteristic is that an educated person should have the skills to find work and to succeed in it. The second is that a person's education should contribute to self-understanding and self-esteem because values are more important than ever in an increasingly impersonal, mobile, and technological world. The third is that an educated person should understand how the economic system works and know how to manage money as well as earn it.

The overall approach of the RISE commission's recommendations describes the heart of career education. The RISE report says that its recommendations "seek to free learning and teaching from the constraints of time, place, and age. They attempt to breach the real and imaginary walls that tend to make intermediate and secondary schools isolated islands for adolescents." Specifically, the commission calls for "a system of learning options in terms of time, place, programs, and formats to give learners a wide choice of ways to achieve their learning goals."

Other commission recommendations are also tied in with career education. For example, the commission calls for credit and noncredit "furloughs" that allow learners to leave and reenter the school system; for extensive opportunities for career exploration, awareness and preparation; for school cooperation with appropriate agencies to assist learners with job placement; and for development of personal values, responsibilities, and decision-making skills.

In its proposal to implement the RISE recommendations, the State Department of Education says that "public education must make a substantive change in the way every student is educated and that systemwide reform is needed." The Department says, "It will be a carefully organized process designed to ensure that all students, regardless of their goals, are prepared by the end of their school career with the essential tools, skills, and competencies to participate fully in adult society."

Goal Statements for Career Education

Although the future looks bright for career education in California, the state hasn't just been sitting around for the past five years. Among its many activities the Career Education Unit has developed ten goals for students in California

which have been used by school districts in developing career education. The state goals are as follows:

1. *Self-awareness.* Students will develop a positive attitude toward self and others, a sense of self-worth and dignity, and motivation to accomplish personal goals.
2. *Occupational awareness.* Students will develop a continuing awareness of occupational opportunities and relate these opportunities to personal aptitudes, interests, and abilities.
3. *Attitude development.* Students are expected to develop a positive attitude toward work and appreciate the contribution of work to self-fulfillment and to the welfare of the family, community, nation, and world.
4. *Educational awareness.* Students will recognize that educational experiences are a part of personal career development.
5. *Economic awareness.* Students will understand our economic system and be aware of the relationship of productive work to the economy and to the individual's well-being.
6. *Consumer competencies.* Students will achieve sufficient economic understanding and consumer competency to make wise decisions in the use of their resources.
7. *Career planning and decision making.* Students will engage in the career development process and accept responsibility for the series of choices that carries an individual along the career development continuum.
8. *Career orientation.* Students will explore career possibilities to increase awareness and understanding of the occupational options available to them.
9. *Career exploration.* Students will plan and participate in a program of career exploration that contributes to the individual's search for occupational and personal satisfaction.
10. *Career preparation.* Students will acquire marketable skills leading to employment in one or more occupations in a selected cluster. This task will be accomplished by means of in-depth exposures designed to enhance their employability and help them recognize that advanced training or continuing education may be necessary.

Career Clusters

If these goals are on one side of the career education coin in California, on the other side are the 15 career clusters developed by USOE. These clusters cover 95 percent of the jobs known today. The Career Education Unit recommends that school districts select the number of particular clusters that meet their local needs. Each cluster includes jobs at all levels—from entry level through skilled, technical, and professional occupations.

The 15 career clusters are (1) business and office; (2) marketing and distribution; (3) communications media; (4) construction; (5) manufacturing; (6) transportation; (7) agribusiness and natural resources; (8) marine science; (9) environmental control; (10) public service; (11) health; (12) hospitality and recreation; (13) personal service; (14) fine arts and humanities; and (15) consumer and homemaking.

Drawing on the state and federal help that has been available, many school districts in California have made giant strides in career education. Some of them have done so with the help of federal funds; others have seen the need for educational change and have responded with their own resources. However, all of the exemplary practices which appear on the following pages illustrate the fact that career education is being recognized as a vital force for change and reform in education.

Chapter 3

Exemplary Practices–Planning

Starting career education in a school is not always easy. The effort requires the commitment and support of everyone responsible for educating students; but even more than that, it requires a key ingredient–planning. Everyone knows that a ship will sink, despite the long and careful efforts of its builders, if the engineers' plans are not properly drawn. Career education may also founder if careful planning is neglected.

Planning can make the difference between success and failure. What is involved? Here are the five basic steps in a good planning design:

1. Conduct a needs assessment. Find out what is and compare it with what ought to be. For the accomplishment of this task, a school committee should be appointed to sample the opinions of students, school staff members, and the community.
2. Develop a statement of needs which will reflect discrepancies between the existing situation and the desired program. A needs assessment advisory committee representing the whole community should be appointed to analyze the assessment and decide what the school district needs. The committee should also analyze available resources and categorize needs on a priority basis.
3. Formulate goals and objectives and develop a plan to implement them. The plan for getting the program started should specifically state when the program will begin, where it will begin, who will be involved, how the program will be operated, and what resources will be used. Possible constraints should be identified.
4. Implement the plan, following the systematic schedule laid out in step three.
5. Evaluate and revise as necessary.

Examples contained in this chapter illustrate the techniques used by several California school districts in planning career education.

Revamped Curriculum to Include Career Education; Reform in a Rural School District

The staff of the rural Camino Union Elementary School District took a hard look at career education before it made any changes. It had two very serious questions: Are children in the elementary grades too young to be involved in career development skills? Is it possible to include career development activities along with the three Rs?

As officials decided to move toward career education under the Vocational Education Amendments of 1968, three major concerns remained uppermost in their thinking:

- Students should develop the capability to make wise decisions for the future from a wide array of career choices.
- The school's emphasis on teaching the skills of reading, writing, and computing should be continued.
- The goals for the one-school district should be relevant and acceptable to students and to the community.

When the decision was made to move toward career education in 1972, the concept of career education was not strange to the staff. The district had been in the process of developing goals since 1969, and one of these goal statements, dealing with economic and vocational competence, had given the staff the opportunity to implement career development objectives.

However, the decision to create a complete curriculum with a comprehensive career development format meant that the project staff and the administration had to reassess all district goals, develop a comprehensive plan including the necessary changes, and create a process for training the staff.

A general philosophical statement was developed first: "The district program will help each individual child to develop to the maximum of his or her

capacity, to function as a responsible member of a democratic society, to learn to think for him or herself, to learn to use knowledge, and to understand and appreciate the world in which we live and the people in that world."

Then career development goals were created to serve as guidelines for all subject areas in all grades (kindergarten through grade eight). Performance objectives were developed for the goals, and relevant teacher activities became part of the basic curriculum.

Individualized reading, language development, and mathematics programs were developed, revised, and implemented. Additional curricular areas such as science, health, music, fine arts, home economics, and shop art were also created so that district goals dealing with self-awareness, self-discipline, leisure time, knowledge of environment, attitudes, physical fitness, health, and safety could be attained.

A natural step in the process of curriculum and program development was to involve students in the decisions that were made. Through staff development the classroom teacher became the prime facilitator of counseling.

The results of all this student, staff, and community involvement in planning were a new curriculum with a comprehensive career development format. The dynamic changes taking place in curriculum and instruction have resulted in a school-community learning laboratory. And school officials say that study trips have taken on a new meaning for students.

What kind of resources does this new career development curriculum require? School officials point to time for inservice programs for the staff, transportation for student study trips, audiovisual equipment, and secretarial assistance.

The curriculum is evaluated by using an assessment form which determines how well teachers have followed through on district goals. The career development objectives in kindergarten through grade three have also become an essential part of the district's early childhood education (ECE) program, and self-concept and motivation inventories are used with all students in kindergarten through grade eight.

Performance Contracts for Teachers in an Urban Comprehensive High School

All educational innovators know there is one sure formula for failure: Don't involve teachers in planning anything new; just hand them a completed package and tell them to teach it. Naturally, teachers are defensive and resistant to changes imposed in this manner. Teacher involvement is essential in planning career education.

The Chaffey Union High School District in Ontario took this credo one step further and urged all teachers to become involved in the development of career education for the district. Fifteen teachers accepted the offer and signed a performance contract, agreeing to write an infusion unit in career education during the summer of 1974. The district, using its own funds, agreed to pay the teachers for a maximum of 40 hours (although some worked up to 120 hours on the project) at about $7.50 per hour. Thus, the teachers received about $300 each for their effort.

To make sure they would get usable materials in return, school officials included measurable performance objectives in the contract. In addition, the teachers under contract took part in an annual July inservice training workshop on career education and had personal conferences with Mary Jo Kohler, the district's instructional coordinator for career education.

The summer's work resulted in 11 multidisciplinary infusion units—instructional materials which could be infused into ongoing study units without changing the textbooks. The materials modified existing course outlines to include the career education concept, with emphasis on occupations. The infusion units, built around the idea of considering a cluster of occupations at the same time, were developed in such areas as electronics, health sciences, remedial reading, oceanography, typing, public speaking, and basic English.

Other teachers under contract produced a career education needs assessment for the district, a guidance-based plan for scheduling students at the district's high school according to cluster goals, and a presentation of 200 slides entitled "Would You Rather Be a Mule?" The 28-minute slide unit, created by a U.S. history teacher who was unenthusiastic about career education until he attended one of the inservice workshops, presents the idea that most people have at least four careers in their life: as part of a family unit, as a citizen who votes and selects candidates, as a wage earner, and as someone who pursues leisure-time activities or is retired. The presentation emphasizes that a career is not just something that a person studies in school since most people will have five to eight careers in their lifetime, only some of which they will be paid for.

All of the infusion units included information on what students actually need to get a job. The

writing of the unit amounted to only about 60 percent of the task. The students also had to try the unit out in the classroom, evaluate it, and modify it if necessary. The infusion units produced under the performance contracts have worked out so well that the district now has more than 40 units in use and more in preparation. The district now has received funding under the Education Amendments of 1974 to help with the cost.

The district has been successful because it involved the teachers, although school officials use a very definite "soft sell" with teachers being exposed to career education for the first time, Mary Jo Kohler says. Since many teachers feel threatened in the beginning, no pressure is placed on the teachers, and they can refuse to participate if they wish.

Career education's success in the Chaffey Union High School District can also be traced to strong support at the top. The district's board of trustees recommended a management plan for career education in 1974. The plan developed by the district included selection of a district coordinator, adoption of a definition of career education, development of goals and objectives, and a time line for involving the faculty.

Here is a copy of the teacher performance contract for career infusion that is used in the Chaffey Union High School District:

Chaffey Union High School District

Teacher Performance Contract

Name_____ High School_____
Dates of assignment_____
Number of hours for implementation_____
Anticipated completion date for evaluation_____

I. Performance Rationale

The intent of the district plan for career education infusion is to involve teachers and students in the task of "building bridges of relationship and relevance" between existing *course objectives* (knowledge, attitudes, and skills) and *life and career applications*. We are not tacking on some special program but instead are integrating career development learning experiences into the existing instructional program. "Learning makes more sense if you know why you are doing what you are doing."

Emphasis should be placed on helping students to see relationships between present courses and career development and the importance of these courses as "foundations for next-level-of-preparation" work in the high school and in institutions of higher education. We recognize at the outset that many young people enter our high schools from junior high schools with minimal awareness of the important relationships between course selection and career planning as this relates to the alternatives available to them in the world of work. Few opportunities have been provided, if any, to explore these alternatives. Many young people subsequently enter our community colleges, four-year colleges, and universities with a nebulous idea at best as to what they will do with their talents and resources.

II. Concepts

A. The teacher should:

Increase his or her perception of the relevancy of course and performance objectives in specified courses to the career needs and interest of the students enrolled.

Discover the extent to which the skills and knowledge currently included in his or her courses have on-the-job applications in the world of work or provide essential preparation for students interested in advanced courses in technical-occupational-vocational areas in the community college.

(Continued on page 15)

Examine first-hand, when possible, the skill requirements for entry jobs for which his or her course is foundational or a direct preparatory step; relate these to one or more of the 15 career clusters established by the USOE; share and discuss this information with his or her students.

Examine with his or her colleagues in the community college the preparation required to enter successfully the entry-level courses which lead to further advanced technical education and training and to job entry at the skilled or semiprofessional levels.

After analysis and assessment, restructure and refocus the course and performance objectives of his or her courses to prepare students more adequately for job entry or for succeeding at the next level of preparation.

B. The student should:

Recognize that all productive careers may be classified into broad career categories or occupational clusters.

Promote his or her own career development by relating his or her potential career interests to one or more of these categories or clusters.

Use career clustering information systems to explore occupational groupings of jobs, job families, and specific jobs being performed in the modern work world.

Differentiate and describe the levels of planning and preparation demands required to enter successfully a semiskilled, skilled, technical, semiprofessional, or professional career.

Observe a variety of jobs which are performed in the community, area, or region and make a special effort to observe trends in the use of technology and the use of emergent equipment and procedures.

Use the career center, other informational resources, and community resources to review several career opportunities for which his or her courses may be a preparatory step.

Demonstrate increased proficiency in the use of basic English and mathematics skills as a participant in a career learning experience.

Demonstrate a growing awareness that basic English and mathematics skills are vital for success in all job clusters.

Seek assistance from teachers, counselors, administrators, and community resource people to pursue his or her career exploration, decision-making preparation, and planning objectives while attending schools in the Chaffey Union High School District.

III. Performance Objectives

A. General

Determine the relationship and relevancy of his or her present course and performance objectives to systems of career clusters and to specific careers in these clusters; and specify whether and the extent to which these objectives prepare students for successful job entry after high school or successful entry at the next level of preparation which leads to job entry after two, four, or more years of higher education.

Develop and provide learning experience which will help each student in his or her course(s) to associate the knowledge, skills, and attitudes developed in his or her course(s) to specific careers within a specified career cluster or clusters; and help

(Continued on page 16)

each student to engage continually in appropriate career awareness, exploration, decision-making, planning, and preparation activities (career development theme).

Help each student in his or her course(s) to identify and analyze the demands of appropriate "next-level-of-preparation courses" at the high school, community college, or four-year college or university which lead to technical, semiprofessional, and professional jobs and assist these students to build preparation bridges leading to successful entry into and completion of these courses.

Develop assessment instruments and procedures for measuring student achievement relating to the learning experiences provided in the area of career development.

Restate his course and performance objectives, if necessary, to promote the career development theme.

B. Specific (Attached as Exhibit A)

Contract teachers will be required to attend one career education staff meeting per month. These meetings will be one hour in length for the purpose of inservice and group monitoring of the district career education goals and objectives.

It is further agreed and understood that the undersigned is to receive an hourly allowance for payment of _____ hours for developing or modifying a previously developed career education infusion unit for class use. Sixty percent of this amount will be received when this new curriculum infusion unit is approved for implementation, and the remaining 40 percent will be paid when the new unit is field-tested with target students in the identified classroom.

The rate of pay for attendance at all meetings and time for developing infusion units will be based on the 1974-75 home teaching hourly rate.

[Signature] _____ Date _____
Classroom teacher

[Signature] _____ Date _____
High school principal

[Signature] _____ Date _____
District career education coordinator

Exhibit A (Specific Performance Objectives)

Instructional component: _____
Length of course: _____
Course title: _____
Estimated number of students: _____
Grade level of class: _____
Campus location of classroom: _____ Class period _____

Details

Description of infusion process: _____
_____
Career clusters discipline identifies: _____
_____
Plans for using career center: _____
_____
Interest inventory test to be used: _____
_____
Anticipated need of resource teacher: _____
_____
Other: _____

Planning for Career Education; Essential Ingredients

What does it really take to get career education off the ground? As the Davis Joint Unified School District put together an articulated career education project for grades seven through twelve, the staff learned that there are several essential ingredients.

First, one person must be singled out to work full time in preparing everyone who will be involved in or affected by the career education activities. In the Davis district that individual was Don Dachner, a high school work experience coordinator who was given a year's sabbatical leave to become knowledgeable about career education and to develop a plan for the district. He concentrated primarily on four areas:

- Research—to find out what was going on in career education in California and to study what was needed in the district
- Informative activities—primarily talking to teachers, administrators, school board members, members of service clubs, parents, and students about what career education is and is not
- Material development—specifically, 12 career education activities that needed to be developed (Descriptions of the activities were presented to interested teachers.)
- Special help and activities for the interested teachers

"If there is one community that should be singled out for special loving care, it is the classroom teacher," Mr. Dachner says, "for it is in the hands of this person that any educational change succeeds or fails."

As in other districts, Davis school officials encouraged teachers to become interested in career education; but "absolutely no pressure from any administrative source" was placed on teachers, Mr. Dachner says. Instead, school officials directed their efforts toward about 10 percent of the teaching staff who showed an interest in exploring the career education approach. Seventeen teachers and counselors were given 40 hours of paid or released time to use in becoming well-versed in career education concepts and in planning and implementing a process of infusing career education into their instructional programs.

"We are relying on this group to develop enthusiasm and competencies and to act as 'movers' in their schools and departments," Mr. Dachner says. They will also be expected to help conduct inservice training programs for fellow teachers during the 1976-77 school year.

In addition, 40 hours of released time were provided for counselors or teacher-counselors to develop an articulated career-oriented and self-assessment testing and guidance program for students in grades seven through twelve.

If the district were to infuse career education into all subject areas at all grade levels, school officials knew they would need other things besides staff development and guidance. They point to other essential ingredients:

- Career centers at each participating school and a district center to house materials that might be shared by more than one school. Multimedia materials will be emphasized, and instructional aides will be hired to run the centers. The centers must also have a specific plan for using the materials or else they will become "storage areas for materials systematically going out of date," Mr. Dachner says.
- A media development class to produce audio-visual materials for the career centers, utilizing local resources. Enrollment will be open to students from all participating schools.
- Transportation in the form of an eight-passenger minibus which was obtained on a lease-purchase plan. It will be used for taking students to the media development class and on study trips and other outings. A small vehicle was chosen because school district experience has shown that no more than eight students should go on a site visit at any one time. Mr. Dachner says, "Visits by a class of 30 to a firehouse, for example, generally produce mayhem."
- Community involvement by encouraging the staff to use community resources as an integral part of their instructional program.
- Resources. The project was funded at $68,648, of which $45,890 will go for instructional support.
- Evaluation and student participation. Students have been present since the first inservice workshop, and six students will be involved in the whole project. They will submit an evaluation at the end of the year. In addition, an outside firm has been hired as a third-party evaluator to act as a professional adviser and to submit an end-of-year report of commendations and recommendations. Also, an assessment procedure is being developed to

measure change in students as a result of their participation in the career-oriented activities which were made part of their regular classes. The results of this assessment are expected to be particularly helpful to those working in guidance.

The Davis project began when a group of 11 teachers, counselors, and administrators sat down and drew up an application for federal funding. As the project unfolds, it is becoming apparent that "a major strength lies in the fact that the person basically responsible for writing the project is directing it," Mr. Dachner says. In addition, "extravagant promises were not made, and the project is manageable."

Plans for Career Education in Los Angeles; Goal to Provide Services for All Students

The Los Angeles Unified School District has been working since 1971 on a comprehensive career education project which has an obvious long-range goal; that is, to develop the capacity to provide comprehensive career education services to all students in the district. Consequently, the district has become experienced in planning all aspects of career education, including instruction, staff development, communication, and guidance.

But the district had to begin with research and development. This effort was carried out in three phases or planning periods. The entire cost was federally funded.

In 1972, while still in phase I, the district was fortunate enough to be chosen as one of six sites in a national curriculum project. During this phase the district concentrated on producing a career education curriculum and on evaluating materials already prepared by commercial publishers for students in kindergarten through grade twelve. Thirty teachers and three resource persons worked full time on this project. Thirty-five units were selected for further refinement and use at the end of this two-year period. Guidance materials were also developed.

Phase II involved a three-month case study of the district. A needs assessment was completed. Surveys were made to discover how much interest in career education concepts already existed among teachers, students, parents, and employers. Existing district programs were evaluated to see if they could provide a basis for a comprehensive career education model.

Phase III involved concrete planning and preparation for a comprehensive districtwide program. Fourteen different kinds of programs, called "implementation options," were prepared and presented to the district's area administrators. Each option detailed the scope of that particular activity; the budget that would be required; and the number of students, teachers, counselors, and business people who might be involved.

During the next step, five of these options were selected, with the help of the area administrators, to be tested during 1974-75—the start-up period of a five-year implementation plan for the districtwide project. The five projects, which are described in more detail later in this report, are:

- The Industry-Education Alliance of Los Angeles County—a format for helping business, government, and labor coordinate their mutual efforts involving students and the world of work.
- Career Expo—a program that enables thousands of students to visit companies and observe different careers in action.
- Competency-Based Career Experience—a program which allows students to learn job skills at work sites and to receive a certificate outlining the skills they have learned.
- Secondary School Option Feasibility Study—a method of giving students alternative opportunities of learning on the job. It has now been merged with the competency-based career experience program.
- Business and Education Exchange Program—a plan which allows teachers and counselors to spend enough time in a company to obtain an in-depth look at opportunities in the working world.

A basic philosophy underlies all these projects. The philosophy, adopted with the assistance of a community advisory group, calls for reorganizing educational institutions and refocusing their energies.

A work ethic that views the individual in terms of the economic needs of society was rejected. Also rejected was a service ethic that subordinates a person's interests to the social, political, or cultural needs of the country. Both of these ethics view the individual in terms of outside forces.

The Los Angeles philosophy supports "the ethic of intent—based upon the assumption that each person is responsible for his or her action and must be an active force in shaping his or her destiny." The goal of comprehensive career education in Los Angeles is to provide a "facilitating process for

individuals to better accomplish this emerging notion and for the public schools to function as an enabling institution designed to meet clients' needs."

Suburban High School Ready for Career Education; Students, Parents Involved

How can secondary schools be changed so that they can more easily incorporate career education? This was the challenge facing Granada Hills High School when it was selected to do a planning study of one of the 14 "implementation options" developed by the Los Angeles Unified School District's Office of Career Education.

The school, which serves about 3,700 students in an upper-middle-class, primarily white suburb in the San Fernando Valley, had an important advantage; the principal was interested in changing secondary education, including the placing of greater emphasis on career education. The school experimented with an approach similar to that later recommended by the California Commission for Reform of Intermediate and Secondary Education (RISE) in the RISE report.

Working with an existing faculty committee at the school, administrators selected 15 faculty members for a special faculty planning committee to coordinate the feasibility study, which was started in the fall of 1974. Twenty-six more faculty members were selected to serve on six subcommittees. These subcommittees were asked to study different areas of school operations and to make recommendations to the faculty planning committee. That committee decided which recommendations to include in a proposal to the district. Students and parents were also involved and were asked to react to the recommendations made by the subcommittees.

The six subcommittees and their areas of study were:

- Community affairs—ways to involve parents and community people more directly in school activities
- Management of the school—the responsibilities of the principal and allocation of time to various activities
- Curriculum and instruction—the option of a school-within-a-school, individualized learning, credit for on-site work, learning requirements, attendance, and accountability of students to teachers
- Evening schools—exploration of ways to use the high school facility for high school students as well as adults during the evening
- Guidance and counseling—the advisability of helping teachers and counselors assume more of a counseling role in providing career information to students and helping them make decisions
- Liaison with California State University, Northridge—exploration of ways to facilitate an exchange of teachers and resources between the high school and the university

Although a complete program has not been implemented at Granada Hills High School because of the expense involved, interest and activity in career education continue at the school.

Chapter 4

Exemplary Practices–Management

A well-planned career education program can still fail if it is not properly managed. And if a program is following a good, systematic planning design, it should be difficult to draw the line between where planning ends and management takes over. In the same way it should be just as hard to separate management from the other aspects of career education: staff development, curriculum development, instruction, guidance, community involvement, and evaluation. They all merge into the whole–a good, ongoing career education program. Success comes when the career education program cannot be recognized any longer; that is, it has been totally absorbed into the regular curriculum. Then career education will have become part of the daily routine education of every child.

A System for Management and Evaluation; Steps for Implementing the System

The California State Department of Education's Career Education Task Force realized in 1973 that school districts with projects funded by the federal Vocational Education Amendments of 1968 were having difficulties in management and evaluation. The task force staff members consulted a private consulting firm, Education Turnkey Systems of Washington, D.C., and came up with a management and evaluation system to help out. They called it the Project Activity Management and Evaluation System (PAMES).

PAMES was designed to enable the career education research and demonstration sites to develop activities, assign resources, and build evaluation designs based on the goals and objectives of the projects. Each site, in turn, developed its own individual PAMES document, which described the necessary events and processes designed to achieve their goals, indicated areas of responsibility, and provided for evaluation and documentation.

Since PAMES treats different aspects of a project separately, it begins with an overview to help show the interrelationships among the individual parts of a project. The overview provides an understanding of the total scope of the project and demonstrates the rationale behind its various parts. It was especially important in the beginning because districts were taking too global an approach, state officials say. The overview helped them narrow the scope of their activities and made their projects more manageable.

The next step, as outlined in Part II of PAMES, calls for a district to identify specific activities in its project and explain what is going to happen and why. This section includes the rationale, summary description, goals and specific objectives, and evaluation procedures for each specific activity.

Part III of PAMES is a time line management chart. It indicates what is going to be done, by whom it will be done, and when it will be done. A legend for the chart indicates who does the actual work, has direct supervision, provides assistance, writes reports, and is the recipient of the activity.

Part IV is a program budget, which should reflect the specific activities in the project. The budget assists in assessing the cost and benefits of each project activity and provides information on the feasibility of replicating certain activities.

PAMES was designed to provide the foundation for a constant evaluation of the progress and process of a project. Since it was designed to meet a variety of needs, the steps to implement the system may vary. However, state officials recommend the following steps for implementing the management and evaluation system:

1. Identify broad goals.
2. Establish an overall conceptual design for the project.
3. Decide on major activities.
4. Complete activity sheets by noting the rationale, goals, objectives, and evaluation procedure.
5. Complete the time line management chart and indicate the tasks that must be finished to complete the activity successfully.

6. Complete the program budget.
7. Submit for approval to the State Department of Education.
8. Revise.
9. Start the project.
10. Fill out task completion report forms as the project becomes operational.
11. Complete product evaluation on the schedule determined by the management plan.
12. Analyze the impact of the project and revise the educational system if necessary.

Steps for Implementing Career Education

The procedure for implementing career education and getting it going in a school district can be divided into nine specific parts. The following nine steps were developed by Arland Benson of the Minnesota State Department of Education and were published in a book entitled *Implementing Career Education Programs* (1975):

1. *Identify the starting point in implementing career education.*
   a. Determine personal needs and perceptions of the needs of others in the program setting.
   b. Determine when a moderate (not strong) need for change and a good chance for successful change exist (for example, helping a department develop career units instead of attempting to introduce a performance-based student grading system which might be strongly opposed by some).
2. *Identify the formal and informal peer structure involved.*
   a. Determine who has legal power and can influence and be influenced directly or indirectly.
   b. Determine who has social and expert power and can be influenced ("support systems").
3. *Communicate openly and directly with the people involved.*
   a. Listen to the people in the program setting, particularly for needs, feelings, and intentions.
   b. Express your own needs, feelings, and intentions in a straightforward manner.
4. *Develop a support system of a small group of people who will work for change.* Develop a team of people who share explicitly stated group goals and make individual contributions.
5. *Analyze all the decision-making processes involved in implementing career education.*
   a. Determine how decisions involving your proposed change will be made on a continuum from one person to an "integrated consensus."
   b. Determine who will be involved in making the decisions affecting your proposed career education change.
6. *Negotiate specific program objectives with the people involved.*
   a. Be clear about what are the mutually agreed-upon goals or objectives: What is your role? What strategies will be used? What outcomes are desired?
   b. Acknowledge mutual sources of power and change: What can both you and the program participant contribute and gain from each other?
7. *Deal with the resistance to the proposed career education program.*
   a. Identify who is resisting and on what basis the change is being opposed.
   b. Attempt to incorporate some of the concerns of the resistance into the change proposal rather than overpower them.
8. *Develop a sequence of short-range goals which lead to the gradual attainment of long-range goals.*
   a. Determine specific short-term objectives with high probability of success. These objectives include the introduction and practice of new ideas and behaviors.
   b. Gradually raise your expectations after attaining some success. Provide for the transfer to and practice of new ideas and behaviors in the life-style of the school and community.
9. *Evaluate the processes and products involved and feed back to step one.* Monitor in detail the relative success of specific program components.

Chapter 5

Exemplary Practices–Staff Development

Good staff development is crucial to the success of career education. The best laid plans are useless without committed people in the school and in the classroom to make the plans work. And it is the purpose of the development program to instill in the staff the knowledge and attitudes needed.

What does the school staff need to know? The needs and goals identified in the career education plan should point to a direction for staff development. They should indicate the competencies staff members must have to incorporate effectively and efficiently the career education process into the curriculum, the guidance program, or even into the administration of the school. Then a carefully considered agenda of staff development activities should be planned to offer a variety of approaches to helping achieve the desired competencies.

For example, a district could plan orientation meetings that would include not only the school staff but school board members and citizens who would be used as resource persons. The meetings would inform them about the career education concept and the specific proposal for the school or district. Such a meeting could win their commitment to planning for career education, generating school-community cooperation, and helping in the completion of the needs survey.

Initial inservice training for selected staff members who will be part of the program would give them an in-depth understanding of the career education concept. It might also produce agreement on short-range and long-range goals and on strategies for implementing the goals. It should also strengthen staff commitment to putting career education into practice.

Curriculum development can also be a part of the inservice activities. Staff members could develop a format for infusing career education into the existing curriculum and could produce specific learning objectives for different grade levels. They could also examine existing curriculum materials and modify them if necessary. Of course, good staff development is not produced in a single meeting but is a continual process. School districts should take seriously their responsibility to commit time and resources to initiating and maintaining effective preservice and inservice training.

Stull Act Used to Promote Career Education; Career Objectives Included in Annual Plans

Career educators in the Covina-Valley Unified School District in Covina have used the Stull Act to help promote career education. The district's federally funded comprehensive career education program and the state's accountability mandate, known as the Stull Act, grew up together.

Therefore, when the school district held an intensive career education workshop in the summer of 1973 for the secondary school teachers and administrators who had volunteered to participate in the project, the Stull Act naturally became part of the discussion. As a result, project teachers were asked to include objectives relating to career awareness when they wrote their performance objectives (or job performance plans) for the year as mandated by the Stull Act.

Successive inservice training sessions were held to help the teachers by providing examples of career education objectives and by showing how they could be achieved. These inservice training sessions were also important in helping the teachers choose different objectives so that they would not all be doing the same thing, Martha Evans, project developer, says.

"In the beginning, many of the teachers relied solely on taking students to the career centers in the high schools," Mrs. Evans says. "The students were getting saturated with a single resource because several of their teachers repeated the same activity. However, through the inservice sessions we helped the teachers choose different activities."

As the project spread, all the teachers in one of the district's three high schools were asked to include at least one career development objective

in their job performance plan and to indicate the relationship between the subject area and the world of work. Many of the teachers decided that the philosophical foundations for career education were in accord with their own educational beliefs and instructional priorities; therefore, they also included career education objectives in their annual job performance plans.

In fact, Mrs. Evans interviewed 42 project and nonproject teachers in the spring of 1974 and found that 31 had included career education objectives in their job performance plans. A follow-up survey in the fall of 1975 found that the majority of teachers were continuing to include the career education objectives.

The career awareness objectives submitted by the teachers include developing career bulletin boards, exploring and utilizing the career centers, interviewing people from the world of work, and viewing career-related media presentations. The teachers specified the desired outcomes for students in relation to the objectives and the expected student performance. Then the teachers met with administrators twice a year to determine how well the teachers were meeting their objectives.

Using the job performance plans to implement career education is strongly recommended by the project directors at Covina-Valley because it gives "a direct and accountable means of involving teachers in career education activities," Mrs. Evans says. "By including a career education objective in their plan, teachers have an obligation to meet that instructional objective."

Ceres Inservice Model; A Full-Blown Approach to Staff Development

After the Ceres Unified School District received a $600,000 federal grant to develop a comprehensive career education model, inservice training for all participants became a high priority because "it was clearly evident that the granting of funds alone was not going to cause a change in education," project officials say.

Therefore they developed, over a three-year period, a career education inservice model. It is based on current educational practices which have been proved successful, such as behavioral objectives, process and product evaluation, simulation and games, and values clarification. It was recognized that there are a number of factors to be considered in the design of an inservice training plan. The first factor is determining the desired outcome, deciding how long it should take, and establishing long-range goals. The second factor is deciding who will participate. The third factor is facing up to budgetary restraints.

Looking beyond those technical details, the project officials decided that "too often, one-shot workshops are given with little or no follow-up; hence, while everyone has 'a neat workshop,' there is little evidence of change in the classroom." Real change, they concluded, occurs only with "a continuing inservice plan which stimulates and encourages people to continue their efforts."

Therefore, they designed an inservice training model which would begin with a workshop and would be followed by a systematic procedure for continuing inservice training. Then they added a third aspect—a performance contract whereby each workshop participant would become more aware of the workshop's goals and objectives. The rate of pay was also specified in the contract.

Another unusual twist was a graduation ceremony to which special guests were invited from the community, State Department of Education, school district governing board, and administrative staff.

"The purpose, while appearing light and tongue-in-cheek, has a very serious overtone," project officials say. "The importance of both the processes and the products of the workshop are internalized. Speakers highlight the accomplishments of the workshop and encourage future use of the products." In addition, certificates are awarded to the "career education practitioners."

So that enthusiasm and motivation can be kept going, a systematic procedure for continuing inservice training is begun. A series of workshops and practitioner meetings is scheduled to encourage and promote group feeling and build on the team rapport that evolved during the workshop. These meetings, which are used for refining ideas generated during the workshop, are held often enough to maintain interest but not so often as to be boring or annoying.

Memos and letters, individual conferences, and small-group meetings are also used throughout the year to personalize and individualize inservice training efforts. These small-group meetings can be initiated by the teacher, principal, resource person, or curriculum specialist. In addition, a certificate of achievement for accomplishing career education infusion is presented at the end of the year.

A major behefit of all this continuing inservice training, project officials say, is that teachers are constantly reminded of the support that is behind them as they work to infuse career education into their instructional program.

Chapter 6

Exemplary Practices– Curriculum Development

Career education suggests curriculum reform. One cannot treat career education properly by developing a little unit on career education; one must review the total structure of the curriculum with an eye toward integrating or infusing career education into each subject.

Ideally, curriculum development should be a natural result of a school district's management plan for career education. It should tie into a completed needs assessment and lead to reform that meets those needs.

Curriculum development is also a major part of staff development since there should be the greatest possible involvement of staff in order to win the greatest amount of support. All educators know that when curriculum change is initiated by administrative fiat, without involving those who have to cope with the change, those who are left out become negative. Because development of curriculum materials by staff members is likely to involve many persons over a fairly long period of time, it is necessary to set priorities and commit time and resources to have an effective program. An adequate budget for personnel and materials is essential.

Others who will be involved should also have an opportunity to discuss the implications of the change. Central office administrators, school board members, and school building administrators must make certain commitments to change. Curriculum reform may also make it necessary to modify the organizational structure to provide for articulation from level to level.

As the career education curriculum is developed, it should be sequential, multidisciplinary, and flexible. It should be a unified, broadly based process and should include the following steps:

- Identify career education concepts and the levels at which each concept should be stressed.
- Analyze the existing curriculum and plan how to infuse career education concepts.
- Redirect the existing curriculum toward career education objectives.
- Review existing materials, identify those which will be appropriate, and develop new materials as needed.

Curriculum Development in Covina-Valley; Performance Contracts/for Accountability

Faced with the job of developing career education materials for its federally funded project, the Covina-Valley Unified School District in Covina turned to its teachers and found 12 who were willing to take on the task on a performance contract basis. The teachers agreed to develop curriculum units called career learning experiences (CLEs); instructional strategies; or media presentations. In addition, cadre group activities, directed by several teachers, developed an inservice training program and evaluated materials for the career centers.

The teachers signed contracts specifying the number of hours for which they would be paid at their regular hourly rate, ranging from 20 to 50 hours, depending on the project. The contract also detailed what the teacher was going to do, how long it was going to take, and what kind of preassessment and postassessment procedures would be used for evaluating the finished project when it was put into practice. The contracts were reviewed by the project developer and returned to the teachers with comments about the desired nature of the finished product.

Project officials decided that performance contracts would be the best way to make sure that teachers would be responsible and accountable for the time for which they would be paid. And if revisions were necessary, the teachers would be responsible for them under the contract. In addition, the contracts helped the teachers state their task and verify its completion. They also helped the project director evaluate the task.

The majority of participants completed acceptable CLEs in the allotted time, the officials say, producing CLEs which require between one day

and two weeks of class time. The CLEs and media presentations, which were built around specific subject areas, were tested and evaluated by the teachers and have been infused into the ongoing instructional activities.

This approach to implementing career education was thought to be so successful that it was used again the following year for the elementary school and adult education phases of the district's career education project.

San Diego Students Given a Career Education CHOICE; Learning Units Created

In the San Diego Unified School District, students have a choice—Project CHOICE (Children Have Options in Career Eduation)—of 130 learning units developed by teachers. The units provide students from prekindergarten through grade twelve with activities to broaden their understanding of the world of work and help them learn how to make career decisions.

The learning units for elementary school students are organized around 12 career clusters that can be infused into the regular school program in a variety of subject areas, depending on the unit being taught. Careers in Music, for example, may be taught in the music period. Banking fits into the math schedule; Body Movement, into physical education; and Commercial Art, into the art period.

Most of the elementary units contain ten lessons of 45 minutes each; however, a teacher may decide to use only part of a unit. At least 20 task cards, spelling out different activities, are provided with each unit. Since the activities vary in difficulty, each student can take part and become an involved member of the group, Barbara Thomas, project director, says.

The CHOICE units are designed to individualize instruction. Students can select the activities appropriate to their own interests or needs. Since the task cards are self-directing, students can also work at their own pace and at their own level. The units were written for student use, but a guide offers suggestions for teachers on how to get the maximum use of the materials. Although the units are intended to reduce the need for adult direction, they can be used in the traditional teacher-centered setting if that approach is preferred by the teachers and students involved, Mrs. Thomas says.

The CHOICE units for secondary school students are intended to help them narrow their career choices. These units are organized around the typical subject areas taught in secondary schools. Some of the units which fall under science, for example, include Science and Careers, Exploring Careers in Natural Resources, Medical Careers, Careers in the Biological Sciences, and Careers in Atomic Energy.

Secondary units can be used full time for one or two weeks or spread throughout the semester in conjunction with other course offerings. The units are self-contained but are also open-ended so that students are encouraged to continue research in their areas of interest. Although the materials may be used exclusively in the classroom, they offer numerous suggestions for extending their use with the resources available in the community or in the school, particularly in the career centers in the secondary schools.

Project CHOICE has been operating since 1973-74 with funding of more than $278,000 from the Elementary and Secondary Education Act, Title III. The district hopes to get another grant to establish demonstration sites for both the elementary and secondary levels and to disseminate the results of the project.

During the third year of the project in 1975-76, seven elementary schools, two junior high schools, two senior high schools, and four nonpublic schools took part in the project. The district could have expanded the project to all schools if it were simply a matter of giving them the CHOICE units, but experience had shown that the units must be accompanied by "a carefully planned and executed staff development program," Mrs. Thomas says. However, the project will be expanded in 1976-77. All of the units will be published and will be available to other school districts at a cost of $1 to $3.50, depending on the length of the unit.

Project CHOICE has operated with two resource teachers, one at the elementary level and one at the secondary level, to help teachers use the CHOICE units and to provide inservice training as needed. As the CHOICE units were field-tested in schools, criterion-referenced tests were given to students before and after they participated. At the elementary level the group mean score before participation in the project was a 30 percent. The group mean score after participation in the project was 82 percent, for an average gain of 52 percent. These figures are based on 74 units field-tested in the participating elementary schools. A total of 2,507 students were involved.

At the secondary level the mean group score before participation in the project was 50 percent. Afterward it went up to 81 percent, a gain of 31

percent. Thirty-five units were field-tested, and 3,054 students were involved.

The elementary school students made more progress because they were with the same teacher for most of the day and were exposed to a number of units, Mrs. Thomas says. The secondary school students went to five or six different classrooms during a day and generally participated in only one unit, she says. Nevertheless, she feels that all students showed "significant gains in career information after their exposure to the units introduced in their classes."

Teachers have been quite enthusiastic about the project, Mrs. Thomas says. She describes the teachers' remarks about the positiveness and usefulness of the project as "phenomenal. Teachers are interested in and find the curriculum units developed through Project CHOICE to be a firm foundation for infusing a career education theme into the classroom setting," she says.

Parents have also responded positively to the project, Mrs. Thomas says, and "student reactions to the units have been remarkably positive. Since there is a wide variety of tasks and activities in each unit," she adds, "students have shown a great deal of motivation and interest in becoming thoroughly involved with the materials." Career education is gaining momentum in San Diego, she says, because of Project CHOICE.

Model Infusion Unit Developed by Consortium; Career Education Integrated into Curriculum

Two unified school districts and a community college district decided that they wanted to do something that would make it possible for every student to graduate with sufficient skills and knowledge to make a wise choice when selecting a career. So the three districts—Orange Unified School District, Santa Ana Unified School District, and Rancho Santiago Community College District—formed the Orange County Consortium Career Education Project and set out to develop a model career education infusion unit for students in kindergarten through grade fourteen.

They accomplished their task over a three-year period, from 1972 to 1975, using about $750,000 in federal grants under the Vocational Education Amendments, Part D. And now the model has been put into practice in all three of the districts.

Using the infusion technique, they integrated career education concepts into the curriculum, drawing heavily from those identified in the U.S. Office of Education's 15 career clusters.

In creating a career education model, the consortium team decided that a "format design" had to be established before a curriculum could be developed so that the curriculum developers would have a path to follow. They created a format which is flexible and easy to use:

1. Title of unit
2. Grade level appropriate for unit
3. Number of students with whom the unit could be used
4. Major subject area appropriate for unit
5. Related subject area appropriate for unit
6. Career cluster
7. Subject area goal
8. Career education goal
9. Subject area concepts
10. Career concepts
11. Rationale (why the student is doing the unit)
12. Unit objectives (which intermesh subject area goal and concepts and career education goal and concepts)
13. Special instructions to the teacher
14. Resources
    a. Multimedia
    b. Materials and equipment
    c. Personnel needed
    d. Other
15. Student objectives (performance objectives)
16. Major subject area activities (coded to student objectives)
17. Related subject area activities (coded to student objectives)
18. Student preevaluation and postevaluation (coded to student objectives)
19. Student preevaluation and postevaluation
20. Samples of implementation (coded to learning activities)

Another successful technique employed by the consortium for developing a curriculum was the request for proposal (RFP) design or performance contract. Teachers who were willing to participate submitted a proposal to develop a unit. The proposals were reviewed by a selection committee, which gave the teachers authorization to proceed. After submitting an acceptable unit, the teacher was awarded a portion of the stipend. The remainder of the stipend was provided after the unit was field-tested and evaluated on the basis of whether students met unit objectives. The final drafts were then reviewed by a technical editor before the units were distributed to the rest of the schools.

"If the RFP design is to be utilized, there must be continuous and constant communication between all parties involved in the process," Jack Sappington, administrator of special programs for the Orange Unified School District, says. "The role of the career education staff must be one of adviser, guide, and consultant so an atmosphere of rapport and understanding can permeate the entire career education effort."

The consortium produced 150 career education learning units at a cost of $216 per unit. The comprehensive career education system also includes guidance components for kindergarten through grade six, grades seven through nine, and grades ten through twelve as well as a system administrator's component.

In addition, the consortium adopted a three-dimensional matrix to help in the development of career education infusion units (see Figure 1). The matrix allows for much flexibility because the processes, such as self-awareness, can be easily intermeshed with the subject-oriented materials, such as career awareness.

Career Education Developed in Adult School; Life Roles and Career Changes Stressed

Realizing that adult education and career education go hand in hand, the Tri-Community Adult School in Covina decided to put together a career-oriented curriculum. The school, which is a joint effort of three school districts (Covina-Valley Unified, West Covina Unified, and Charter Oak Unified), appointed a career education curriculum development committee to get the ball rolling. The committee was composed of seven teacher-coordinators, counselors, and administrators and about 80 adult school teachers.

The committee developed a large publication called *Tri-Community Adult School Career Education Course of Study*. The guide contains information on all kinds of subjects—everything from foreign languages to key punch operations to jewelry making to wilderness safety—in at least one of three ways.

The first way provides a general outline of what the student needs to know about that particular

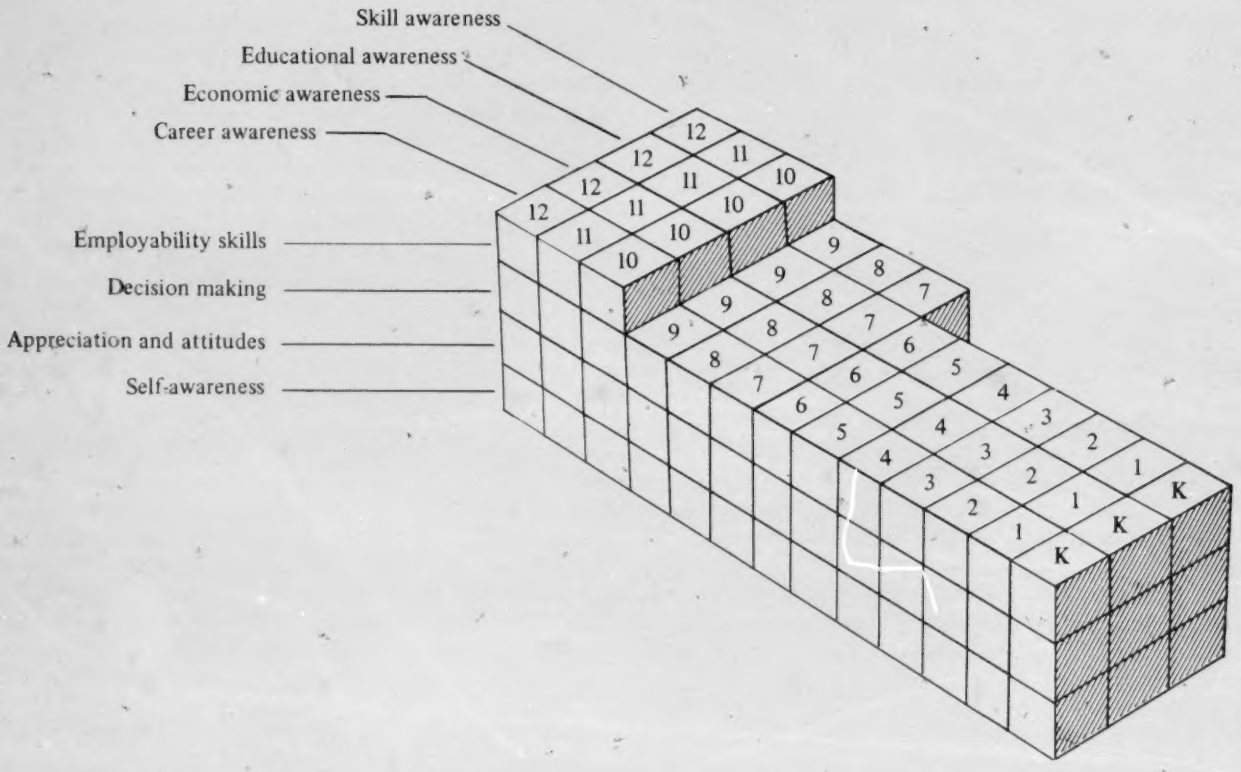


Fig. 1. Three-dimensional matrix for development of career education infusion units, kindergarten through grade twelve

subject, the kind of experiences the student should have, the resources that will be necessary, and the curriculum areas and occupational clusters which are related to this subject. The second approach provides a list of specific career learning experiences that can be included in current courses. The third way provides completed courses of study to be taught at the school.

By incorporating material into existing courses or creating new courses, the adult education staff is able to teach the concepts of life roles, social status, and career change. The adult students are taught both general knowledge and specific skills, according to their own goals.

The committee also developed a "job opportunities index" which "graphically lays out what connection a particular course has to careers," Vincent Van Detta, principal of the Tri-Community Adult School, says. The index briefly describes each course and includes an abbreviated list of the goals and objectives and the career learning experiences. It lists the major occupational groups related to the course. Groups are divided into the skilled, technical, and professional occupations. Looking further at the opportunities available, the index describes the education or experience necessary for employment, current pay ranges, and the local employment outlook for jobs within these clusters.

The school, which operates in several locations, also has a career guidance counseling center for adults who want further information about jobs and professions. "The center was established to provide students with an opportunity to meet with counselors and to pursue in-depth information germane to making good career choices," Mr. Van Detta says. The center includes a complete program of testing for those who want to identify their interests, aptitudes, and abilities, he says.

The materials put together by the curriculum development committee were first used in September, 1973. Nearly 5,000 adult students enrolled in each of the three trimesters of the school year were involved in the career-oriented curriculum.

Career education has been received positively in the Tri-Community Adult School, Mr. Van Detta says. After the first year of the program, 730 students were given a 50-item adult student career development survey, designed to assess career awareness. The results showed positive gains, he says. A survey of teacher attitudes toward career education was also administered to 65 teachers, and 86 percent responded positively to the career education efforts of the adult school program.

Learning Centers Made from Boxes; Task Cards, Worksheets, Games Used

Because only limited commercial materials were available to teach career education concepts to children at the primary level, officials in the Ceres Unified School District decided that they would have to develop their own materials. As a result, they put together career education learning centers for classrooms at the primary level. Actually, the "learning center" is only a cardboard box, but it is full of task cards, worksheets, games, and other materials to use in completing specified activities.

Because the *Kuder General Interest Inventory* (Chicago: Science Research Associates, Inc.) is used in the district's junior high schools, the project team decided to use interest areas identified by the Kuder test as the foundation of the learning centers. Team members felt that concentrating on the same interest areas in both elementary schools and junior high schools would improve the coordination between the two. They also wanted to provide a foundation for relating job awareness to interest areas and for relating the school world to the world of work.

Anything that went into the learning center had to meet seven basic requirements. It had to be something that would be open-ended, self-correcting, color-coded, durable, storable, attractive, and colorful. It also had to be something the teacher could reinforce.

The task cards were constructed on three levels: easy, average, and difficult. Symbol coding was used so that the children could find the task cards the teacher wanted them to use (see Figure 2). The cards were also coded as to the number of participants required for the task.

This rebus format, which used symbols to represent words, was also used to "spell out" the directions for each card so that nonreaders could use the cards on their own. These designs made the following of directions interesting for the children. All of the symbols were standardized so that the materials could be used in any of the learning centers.

The pictorial code is not intended to discourage students from learning to read. In fact, the rebus format can help children learn to read because it emphasizes certain basics of reading. For example, the symbols must be read left to right; meaning must be derived from graphic signs; and repetitive practice is provided in the reading of symbols.

So that the learning centers could be related to the world of work, community resources were used. Parents and other community people were

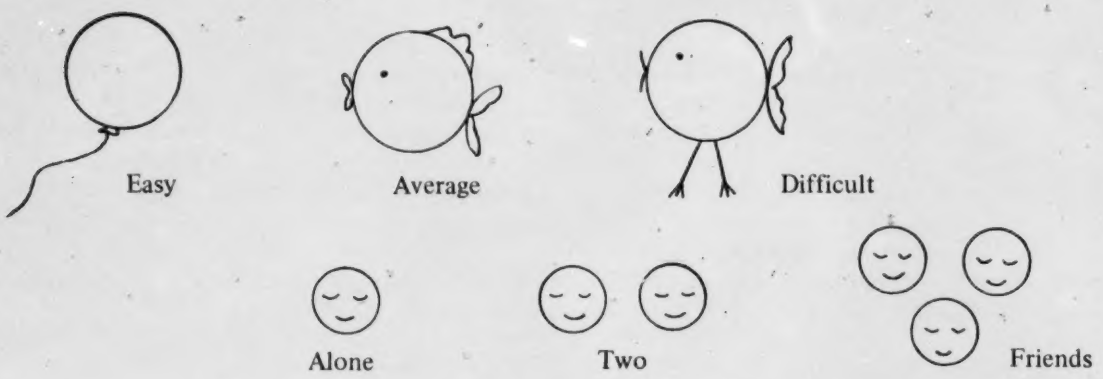


Fig. 2. Symbols used on task cards to identify difficulty of task and number of participants required

invited to come to class and explain how a particular skill being studied in the learning center was used in daily work. For example, the mother of one student talked about her job as a bookkeeper at a time when the class was studying computation.

The learning centers have been evaluated by the use of a locally developed structured interview for children at the primary level to see if they learned anything through the centers. Results have shown that the centers are very successful. The results were statistically significant at the .001 level of confidence; that is, in only one chance out of a thousand could learning have occurred by accident.

Task Cards Used to Teach Career Education; Minimum Teacher Preparation Required

The problem of finding instructional materials for pupils in elementary schools was solved in a different way by the career education committee in the Simi Valley Unified School District. Searching for materials that could be easily infused into the basic subject matter taught in elementary schools, the committee decided to develop a series of task cards since teachers had found this format to be very successful.

The committee produced packets of illustrated task cards and had them printed so that they could be distributed to every kindergarten through grade six teacher in the district. With each set teachers were given a storage box large enough to add materials as needed. The teachers were encouraged to color and laminate the cards if they wished to do so. (Samples of the task cards appear at the end of this chapter.)

Although the units could be used with a minimum of teacher preparation, teachers were required to attend a workshop to receive the materials. Participating teachers were also asked to assist in evaluation and in the development of additional materials.

Many of the task cards are organized into social studies learning packets. They include mention of occupations as related to the individual, community needs, and occupational choice. Since career education concepts include the total life experience of an individual, students are also given an opportunity to plan leisure-time activities. The cards also touch on many other areas, such as attitudes, values, and self-awareness.

School officials say that because the cards are so interesting and so easy to use, the integration of career education concepts into ongoing instruction has occurred smoothly.

The project was put together by six teacher-writers, an artist, and a typist under the direction of two central office administrators. Costs included funding for released time for teachers to do research and meet together, payment for instructional supplies, and salaries for substitute teachers and part-time clerical help.

Career-Oriented Curriculum for Handicapped; Students Helped to Become Self-Sufficient

The one group of students that may need career education the most—the handicapped—have usually not been receiving such instruction. Academic education has been emphasized, and little attention has been paid to career guidance or occupational preparedness. These were the feelings of school officials in the Ceres Unified School District when they set out to develop a career-oriented curriculum for special education students. They finished their tasks in 1976 after three years of funding under ESEA, Title III.

One of the main thrusts of the curriculum developed in the project, called Career Education—

Special Education, is to help handicapped students develop positive attitudes and realistic approaches. According to surveys, employers' dissatisfaction with handicapped employees is based primarily on the employees' poor attitudes, which usually result from low self-esteem.

The project is based on the belief that handicapped students need comprehensive exploratory programs at an early age if they are to develop the self-confidence and positive attitudes that will allow them to adjust properly to the world of work. Ceres officials note that any work experience or vocational education programs that have been available to handicapped students generally do not extend below the secondary level.

Project officials also believe it is important to have a reciprocal arrangement between business and industry and the schools so that the potential of handicapped students can be understood and developed fully. Employers often judge handicapped persons according to incorrect stereotypes which severely limit the careers of handicapped employees. Therefore, it is important to use the "community as a classroom" to correct these images.

The curriculum developed in the Ceres project is built around a series of career-oriented goals and objectives, a system for putting them into practice in the classroom, and a process for keeping track of the students' success at mastering the objectives. The curriculum is designed to help students develop an ability to:

- Be economically self-sufficient.
- Be aware of self and able to cope.
- Develop necessary academic skills.
- Develop habits and attitudes that will lead to good health and safety.
- Develop a sense of civic responsibility and be productive members of the community.
- Develop the career skills that will make it possible to maintain a family.

This whole process has already become well established at Ceres, project officials say.

"The special education staff has accepted and implemented the idea of career education into practically everything they do in the class," says Eldon De Witt, a project official. "Their vocabulary is career education. Their lesson plans, bulletin boards, and field trips reflect the change in concepts."

The project has developed 70 career education objectives, together with a lesson plan for each, and reinforcing materials or suggestions for implementing the objectives. Each one is devised in such a way that it can be expanded by anyone using the materials, Mr. De Witt says. These materials cost about $60. Start-up costs for developing the whole concept averaged about $500 to $600 per student. However, the concept now can be used at a much smaller cost.

From A to Z with Less TV

(Sample Task Card)

Save time for:

A walk in the woods or around the block
*B*ike riding; baking a cake; bowling
*C*urling up with a good book; cooking; crafts
*D*rawing pictures; dancing
*E*xercising in the great outdoors; experimenting
*F*riends; family
*G*ood deeds; games; gardening; growing
*H*ikes; homework; handball; hobbies
*I*nstruments; investigating
*J*ust plain loafing; jacks
*K*eeping fit; kite-flying
*L*ibrary visits
*M*aking things (clothes, models, gifts, and so on); museums
*N*oticing the beauties of nature
*O*ffering to help those around you
*P*laying games; painting; piano-playing
*Q*uestioning
*R*eading to your kid sister or brother; roller-skating, running, racing
*S*kipping rope; swimming, sewing
*T*alking to Mom or Dad or anyone
*U*niting in a club
*V*iolin- or viola-playing; vital projects
*W*riting letters to Grandpa or Grandma; writing stories, poems
*X*ylophone playing
*Y*outh
*Z*est for life!

Fame and Fortune

(Sample Task Card)

Concept: Attitude development.

Objective: Develop attitudes toward school and work that will contribute toward achievement and advancement.

Goal: Develop skills in reading, writing, speaking, and listening; and gain a general education.

Level: Intermediate.

How does a person become famous? Is it something decided at a young age and then worked for? Is it accidental? Is it a lot of good things done for a lot of people? How do we decide who is famous enough to be mentioned in history books?

Some persons might have called Abraham Lincoln a jack-of-all-trades and master of none if they had known him as a young man. He tried many jobs: farmer, carpenter, Indian fighter, storekeeper, lawyer, postmaster, surveyor, and politician. He also worked in a sawmill and on a riverboat. Yet eventually he became President of the United States!

Read a biography of Abraham Lincoln. Then try to explain how Abraham Lincoln became President of the United States.

Find out about the careers and work experiences of other presidents. Were they as undecided about jobs as Lincoln was? Why or why not?

Mommies at Work

(Sample Task Card)

Concept: Career awareness.

Objective: Recognize the importance, contributions, and dignity of all occupations.

Goal: Understand and practice the skills of family living.

Level: Primary.

Teacher information: Form a "think circle." Ask the children, "What is a mommy? What do mommies do?" Discuss various occupations, including those of parent and homemaker. Read *Mommies at Work* (available through the Idea Factory), by Eve Merrian.

Make a torn paper picture on 12" x 18" background, showing your mommy at work in her dominant environment (for example, Alphie's Restaurant), with a picture of mommy at work showing through the window.

Make a collage of magazine pictures of women working. Discuss the lack of variety of jobs that women hold.

Note: Lucky Little People, career finger puppets, are available at the Idea Factory.

What I Like to Do

(Sample Task Card)

Concept: Career planning and decision making.

Objective: Use knowledge about one's self to make decisions about career and education alternatives.

Goal: Learn how to use leisure time.

Level: Intermediate.

List at least five things you like to do. You may use the following list for ideas or make up your own:

1. Go outdoors.
2. Stay indoors.
3. Draw pictures.
4. Talk to people.
5. Work alone.
6. Work with people.
7. Work with my hands.
8. Try new things.
9. Help others.
10. Make people happy.
11. Collect things.
12. Read books.
13. Work with numbers.
14. Work with machines.
15. Play ball.
16. Watch television.
17. Watch the sun set.
18. Ride a bike.
19. Go for a swim.
20. Go water skiing.

___ 1. _____

___ 2. _____

___ 3. _____

___ 4. _____

___ 5. _____

Put a line under the things on your list that you would do by yourself.
Place a dollar sign ($) in front of those ideas that cost money.
What new information have you learned about yourself?

Hobby Hunt Questionnaire

(Sample Task Card)

Concept: Career planning.

Objective: Recognize that career planning should be related to one's interests, abilities, and aspirations.

Goal: Develop a desire for learning now and in the future.

Level: Intermediate.

Sometimes interests started when you are young are the beginning of a lifelong hobby or even preparation for an interesting career.

Interview a classmate, using the questions from the Hobby Hunt Questionnaire. Have someone interview you. Number from 1 to 17 on a piece of paper. Fill out the questionnaire as completely and as honestly as possible before the interview. Place the completed questionnaire in your personal file.

Remember that good interviewers (1) put at ease the person to be interviewed; (2) show that they are good listeners; (3) allow enough time for the interviewee to answer each question completely; (4) speak clearly and slowly; and (5) do not pass judgment on or make remarks about ideas that may be different from their own.

Hobby Hunt Questionnaire

1. Name.
2. Name of hobby or special interest or what you enjoy doing most.
3. How did you get started? When?
4. Did someone teach you? Who?
5. Did you teach yourself?
6. Was it easy or difficult to learn?
7. How do you feel while doing it?
8. Are there stores and places that can help you? What are their names?
9. What supplies are needed?
10. What are some special words or terms (lingo) you use?
11. Do you do it with a group or by yourself?
12. Can you do it all year around? If not, when can you do it?
13. Do you have to wear special clothes?
14. What books have been written about it?
15. What, if any, hazards are involved?
16. What career could this hobby lead to?
17. How does this hobby help you enjoy your spare time when you finish schoolwork?

Chapter 7

Exemplary Practices–Instructional Services

Many educators, when considering career education, ask the same question: What is so different about teaching career education? Essentially, there are three significant elements in the teaching of career education:

- Developmental emphasis
- Use of community resources
- Infusion process

Developmental emphasis is a concept that not only recognizes the different developmental goals of each age span but also takes into account a student's needs. For example, an adult may need self-awareness activities as much as does a child in the early grades of elementary school, even though self-awareness is usually considered to be a developmental goal for pupils in kindergarten through grade three. At every level emphasis is placed on teaching values and attitudes, making decisions, and relating subject matter to the real world.

Making extensive use of community resources is one of the best means of putting career education into practice. Parents, people from business, industry, and labor, and paraprofessionals can all play a very important role. Probably the most unique aspect of career education, however, is the infusion process. Infusion simply means integrating or incorporating career education concepts into existing subject matter and into the day-to-day instructional and guidance activities of any educational institution.

Career education should not be an addition to the curriculum. Instead, course content should be modified to include career education experiences drawn from school and community life and from the world of work. Course content can be modified without disrupting normal course activities; in fact, it should enhance them by transforming traditional subject matter into relevant, motivating experiences for students. Emphasis should be placed on a practical application of the skills learned in the classroom. Pupils should be shown how the skills can be used in real-life settings.

The major steps in the infusion process are:

- Identify parts of the existing curriculum that can be used to accomplish career education goals.
- Classify existing materials and determine what additional materials and resources are needed to accomplish these goals.
- Revise existing courses of study and curriculum at the pertinent grade levels.

An interesting side benefit to the infusion process is that it can be used in connection with a variety of methods or approaches. In an interdisciplinary approach, for example, students can see the interrelationships among various subjects. The occupational cluster approach can also be used in which self-awareness is introduced at the elementary level, one or more occupational areas are explored at the junior high school level, and an in-depth examination is made of one or more specific occupations within a certain cluster at the high school level.

Other activities can involve simulation, role playing, the decision-making process, and the knowledge and experiences of community resource personnel. The use of the media can enhance all presentations. And there should be articulation between subject areas, within grade levels, and between the school and the community. All career education activities will focus on one or all of three strands–educational, occupational, and leisure–and will emphasize those aspects which meet student needs or teacher objectives.

Instruction, Guidance, and Community Exploration; Parochial Schools Included

For a successful career education program, it is necessary to blend instruction, guidance, and community exploration, project officials from La Mesa-Spring Valley Elementary School District in La Mesa decided. And that is what they have done. The district has now infused career education activities into the regular curriculum in kindergar-

ten through grade eight in six elementary schools and two junior high schools (including two parochial schools that are involved in the project).

The principal tool that the 50 project teachers use is a curriculum guide called *Curriculum Activities for Relevant Education (CARE),* which was developed, field-tested, and evaluated by teachers. In this guide, which is indexed, a teacher planning almost any kind of study unit can find something about career education to tie into the unit, according to Linda Cole, project counselor.

The guide also includes activities related to affective education, and these self-awareness projects are used to meet guidance goals in the elementary schools. In a more formalized guidance program at the junior high school level, all eighth graders use career centers in an organized process to gain information about themselves and about career areas related to their specific interests. (These centers, which provide career information, testing, and counseling, are described in Chapter 8 of this publication.)

After the junior high school students finish the career center process, they are eligible to spend one to three weeks in the community exploration phase of the program. Here students may visit numerous locations according to their interest. For example, students have tutored at other schools and worked for a local motorbike dealer. The students are supervised by volunteers for the one to three hours per day of their visit. Since all sites are within walking distance of the schools, transportation is not a problem.

So that elementary school students can also participate in community exploration, a list of community resources has been developed. Teachers can use these sites for small walking trips, minibus trips, or full-fledged study trips for the entire class.

All three aspects of the project are designed to teach the district's instructional goals and guidance concepts developed by the California State Department of Education. These concepts have been published in the monograph *Career Guidance: A California Model for Career Development.*

The La Mesa-Spring Valley project started small in 1972 as one of the California State Career Education Task Force sites. After that two-year project was finished, officials were able to expand the project with a three-year grant under Title III of the Elementary and Secondary Education Act. A $122,646 grant for 1976-77, the third year of the federal project, has been awarded under Title IV, Part C, of the Education Amendments of 1974. School officials also intend to apply for a fourth-year grant to disseminate the results of the project.

For the implementation of this total career education program, it was decided that lead teachers at each school would be selected and trained and would then help introduce the concept to about five teachers at each school who volunteered to participate. One paraprofessional was hired per school and called a career education intern. These interns, who assist teachers with the career education activities, proved to be key people in the project, according to Bill Pitts, project manager.

The lead teacher received inservice training and worked closely with the interns for the first five months. The volunteers for the community exploration program also attended inservice training meetings and were assisted by the interns and the project staff. Many of the community sites were recruited by the staff in face-to-face visits.

The annual per-student cost of the La Mesa-Spring Valley project is about $50, Mr. Pitts says. He notes that this is "obviously more expensive than it would be for a district where career education was made a districtwide priority and where controls over implementation evaluation were not as extensive." The paid project staff consists of the interns, the project manager, the project counselor, and a secretary.

Evaluations for 1975-76 showed that project students scored significantly higher than did a control group in three of nine areas in a career development survey. They also did better in three other areas, although the difference was not statistically significant. In another test to measure the direct effect of the *CARE* curriculum guide, students scored significantly higher in one of seven areas. They also scored higher in three other areas, but the difference was not statistically significant.

In evaluations of the community exploration program, project students did better on school-related behavior but less well on attitudes about self and work. However, project officials are not discouraged. They say these attitudes are difficult to measure. They still support the program, which they say has received excellent response from students and parents. Nevertheless, they agree with an evaluation consultant that "curriculum-based instruction combined with career centers has the greatest impact on career education goals."

Perhaps the greatest tribute to the project comes from Pearl McLean, former principal of the La Mesa Intermediate School, who directed the proj-

ect in 1975-76 but was transferred to Spring Valley Intermediate School in 1976-77. Favorably impressed by the program, Miss McLean decided to pay for a career education intern from Spring Valley's own budget so that the project could be carried on at the new school as well.

A new school, Northmont Elementary School, will also be added to the project in 1976-77, but the focus will be different. As an experiment, Northmont teachers will be given inservice training, but no intern, to see "what they can do on their own," Ms. Cole says. "We want to see," she adds, "if we can get career education going without a lot of extra funding."

Reality Land: Role Playing in Ceres; Program Different in Each Class

It's no secret that children can learn by doing—and it's certainly a lot more fun. It is one thing to have a math teacher explain how to compute interest rates and quite another for students to have to figure out the interest rates themselves and then pay the money!

The Ceres Unified School District has found this kind of simulation and role playing to be a "powerful tool" in achieving their career education objectives. The district has developed a way of creating a whole mythical society called Reality Land, which gives elementary school students a chance to role-play real life situations.

Reality Land consists of a minicity complete with an economic base of businesses and a governmental structure. Students play the roles of employers, employees, and consumers as they learn to be responsible citizens within their society. School officials say that students take their roles seriously. The simulation ceases to be gamelike and becomes very real.

The basic rules for the miniature society are introduced by the teacher, but as the pupils learn how to govern themselves, the teacher lessens direct control. The community elects a city council to formulate its laws, which generally include penalties for theft, tax default, misdemeanor behavior, and property damage. In this stage of setting up the society, the local city council and mayor can serve as direct consultants.

The general plan is that children earn money, in the form of scrip, for performing work. The scrip is used in conducting normal business operations and in paying taxes, which in turn provide services and goods for the general welfare. If youngsters spend too much of their money for goods or services during the week, they might not have enough left for taxes. Then they must borrow money from any number of sources, all of which charge interest. Thus, the children have practice not only in understanding economic concepts but also in performing basic math computations when they compute the interest.

One of the more promising aspects of Reality Land is that it is open-ended. The society can be extremely complex or quite simple. Each class evolves differently. Some classes set up a society that becomes so complex that it can continue growing during the entire school year. Teachers who have used Reality Land say they felt good about what they were doing and that the experience motivated children to learn. Their opinions are backed by an evaluation which showed statistically significant positive results.

Why do teachers like to use the Reality Land simulation? In general, they offer these reasons:

- Children should be involved in meaningful learning activities that are related to their daily lives and are similar to the real world.
- Children gain satisfaction not only from material rewards but also from the knowledge and skills they acquire and use as they build their simulated society.
- Children have a far more realistic experience in working situations, and this experience helps them build confidence in their working abilities.
- The more complex the society becomes, the more opportunities children can experience.
- Learning is enhanced by doing, and simulation is an attempt to interpret abstract concepts in an active manner.

In addition, Reality Land teaches students how government and business operate and the relationships between the two. It gives them practice in becoming competent consumers, helps them learn how to make decisions, and helps them to develop good work habits and attitudes. It teaches them about money and its role in society and helps develop personal fiscal responsibility.

Of course, Reality Land also teaches students much about the world of work: how common services develop, why there is an interdependence between the worker and society, and what are the interpersonal relations in an economic setting. And it gives students a chance to practice basic skills, learn how they are applied to the world of work, and develop and investigate areas of specific interest in a business setting.

Community resources are very important in developing a simulated society. Community members can answer questions, either at their place of work or in the classroom. In Ceres the community was more than cooperative. For example, one small restaurant owner opened his business on the normal day off so that the children could take over, acting as owners, waitresses, cooks, dishwashers, and customers.

Suggested procedures for establishing a simulated society that were developed by the Ceres district staff are listed on the next page. The society is open-ended and may take any form the teachers and their pupils need. There is no single right way.

Simutown in Ontario-Montclair; Focus on Banking, Business, Civil Organization

The mythical site of Reality Land has a sister city called Simutown. Its residents are the pupils in the upper grades in the Ontario-Montclair Elementary School District. Simutown has a slightly different focus than does Reality Land; it concentrates on banking, civil organization, and business operation.

Simutown begins in about the same way, using lead time for students to earn "chips" and "simubucks" for various classroom activities. These initial earnings become part of their bank accounts when the bank opens. Students are given "how to" sessions in banking, civil organization, and business organization. Then they can apply for the position of bank manager or bank teller, and there are job specifications for each. Students must provide references, fill out an application form, and take a written exam. Those who score the highest are given oral interviews.

Once the teller and manager are chosen, the bank opens. Students can open a checking account, savings account, or loan account as needed. Checks and deposit slips are available for the customers. Each student keeps track of his or her own account. The bank records and interest are kept on ledger cards, and bank statements are sent out regularly. Bank management is checked by a bank examiner (who could be a community bank official, an accountant, or other business person).

The civil organization activities center on a mayor and council type of government and include the filing of petitions, a campaign, and an election, with the winners becoming the elected officials. The council issues business licenses, assesses taxes, and passes ordinances required for business operations. Tariffs are set for goods brought in from outside Simutown, and a court and justice system may be initiated.

In the business operations activities of Simutown, students may operate businesses on approval of the city government. Franchise fees and capital investments involving loans from the bank may be required. Business operators can set their own prices and operate their businesses in accord with the ordinances of city government. However, careful records myst be kept because all businesses are audited at the end of the experience.

Like any other effective program, Simutown has grown as the need arises. Recent additions include a post office, a place for medical and hospital services, a light and power department, and "simucharge." Teacher inservice training has been an integral part of Simutown. Teachers who participate attend several meetings and receive a teacher's guide and "how to hack it" packets. On-the-spot help is also available if needed.

Teacher and student evaluation is a continuing activity in Simutown. Students are tested to measure their growth in content areas like math, social studies, creative writing, economics, consumer competencies, and language arts.

"Simutown has proved to be a remarkable success," Norman Steinaker, project specialist with the district, says. "It is fun for students [and] challenging for teachers. . . . [It] results in real student growth in many content areas and in interpersonal relations."

Puppets Used for Self-Awareness Activities in Covina-Valley

To elementary school students in the Covina-Valley Unified School District in Covina, career education has meant learning about themselves and about how to get along with others because the district has placed a major emphasis on the combination of self-awareness and career awareness.

To accomplish its goal, the district chose commercial materials—the *Developing Understanding of Self and Others (DUSO)* kit—produced by American Guidance Service, Inc. The kit contains puppets, audiotapes, stories, and large visuals to instruct pupils in kindergarten through grade four and to encourage them to appreciate the importance of human relationships. It stresses the values of treating others as one would like to be treated and of recognizing the importance of differences in people, including their strengths and weaknesses.

The older students in this age bracket are introduced to the importance of work in their

Steps to Establish a Simulated Society

- Play a number of simulations and games in both large and small groups. Some of the more simple simulation games that are easy to begin with are: Lost on the Moon, Peaches or Grapes, The Game of Farming, and many others.
- Use and explore values clarification exercises, such as those in the book *Values Clarification: A Handbook of Practical Strategies for Teachers,* by Sidney Simon, et al. These exercises will help set the stage for the successful introduction of microsocieties.
- Send a letter of explanation to all parents. In addition, parents can be asked for information so that they become actively involved.
- Make a bulletin board with careers as a theme. Children should be actively involved. For example, they can look through magazines, cut out pictures of the jobs people do, and put the pictures of jobs they think they might want to do later in life on the bulletin board. A little book on bulletin boards with a career education theme, entitled *Career Education Bulletin Boards* (issued by Fearon Publishers) offers many ideas.
- Discuss jobs related to the school. You may want to list on the chalkboard all the jobs the children can name that school personnel do.
- Have children choose an occupation and list on the board all of the duties or jobs related to that occupation.
- Start rewarding children with old milk bottle caps or poker chips for performing the behavior that you are trying to teach. Consider giving children chips for turning in good school papers, taking part in discussions, raising hands, and so on.
- Suggest that another way to earn chips would be to operate a business in the classroom. Some first businesses that are easy to start are the Pencil Sharpening Company, the Drinking Fountain Company, or the Janitorial Company. The teacher could sell the drinking fountain to the children, and they then could charge other children for the privilege of drinking water.
- Observe that from this point on the children will suggest other businesses and that the society evolves rapidly on the basis of the children's needs and interests.
- Remain in control of all businesses and the government until the children form their own government. It could be helpful to discuss business licenses and proposals and the need for a city government to regulate businesses.
- Remain in control as director of health, education, and welfare. The teacher will gradually introduce needed forms. Taxes could be levied at this time.
- Take study trips at any one of the stages where appropriate. Invite resource persons into the classroom. For example, when the value of chips and money is being discussed, it might be a good idea to take a field trip to a bank or ask a person from the bank or a savings and loan company to talk to the children. As the children become interested in business, study trips to restaurants and supermarkets might be arranged.
- Observe that, as the society evolves, other needs may become evident. Children will probably need to form their own city government with a mayor and council. Ways of governing their society will need to be discussed. A trip to the local city government could be arranged; and, possibly, the mayor could be invited to talk to the class. Later, the need for a judicial system might become apparent. Then, instead of the teacher resolving all disputes, the children could run their own judicial system.
- Open the society for a certain length of time, usually during social studies time if appropriate. The amount of time allotted each day and the number of days per week would be up to the teacher. Some businesses would be open all day and some only at Reality Land time. The teacher might want to run the society for a specific length of time, such as nine weeks or a semester. Others may want to just "play it by ear" as far as length of time is concerned.

future lives and the lives of their parents. They are encouraged to begin to explore the types of satisfactions and life-styles that are related to different occupations. This classroom guidance program, which began in four schools in 1973, is now used extensively in eight schools. All 15 elementary schools in the district have been exposed to it. The program was expanded to the upper elementary grades in 1976 with another unit, *Toward Affective Development*, also produced by American Guidance Service, Inc.

Career education officials at the school district level are enthusiastic about their elementary school program. As one said, "When students told teachers that they liked their guidance class 'next best' to recess, the teachers knew they were on the right track."

At first, counselors had to work closely with teachers to help them develop the confidence to use the materials; however, the confidence of the teachers increased as soon as they saw that their students were interested in the program. Reporting on changes in students as a result of the program, teachers said that students were much better about making new students feel welcome in the school, were more courteous and attentive to the opinions of others during class discussion, and acted as if the classroom were a more interesting place.

As to the older elementary school students, teachers said that there was a growing awareness about the advantages and disadvantages of a wide variety of occupations because students had been given an opportunity to discuss what people enjoy about their jobs and how jobs are important to people in ways beyond merely providing them with a living.

Covina-Valley officials said that the program has given them an excellent opportunity to implement a successful career guidance effort in the elementary grades with minimum cost for development and a minimum of teacher time in inservice education. They stress, however, that inservice training sessions, backed by administrative support, played an important role in giving teachers the willingness, knowledge, and confidence to use the materials successfully.

House Built in Chaffey; Responsibility Shared

The somewhat old idea of having students build a house has been expanded to the ultimate degree in the Chaffey Union High School District in Ontario. Using a very wide interdisciplinary approach, the students didn't just build a house. They designed it, decorated it, landscaped it, marketed it, and sold it.

Their first house, a 1,700 square foot structure, was built in 1974-75 and sold for more than $38,000. School officials used the money to buy another lot, and in 1975-76 the students built a 2,200 square foot house—so large that they call it Casa Grande—which sold for about $58,000. The profit from that sale has been used to buy two more lots side by side for the following two years. So far, 280 students have gotten hands-on experience in this project, making it possible for students to experiment with very many career choices.

The construction class concept started small, with playhouses and tool sheds. It grew to the house stage just as the district was starting to infuse career education into the curriculum. It was perfect timing that allowed the district to make the most of the house construction project. The project was launched with the selection of a community advisory committee. It included contractors of all kinds, a real estate broker, a city inspector, an engineer, architects, an accountant, and the vice-president of a lumber company. Committee members shared their expertise both in class and on the job. And they were always there when the project involved electrical wiring or anything else that would have to be inspected by the city.

The construction class began with the students spending a month in the classroom, studying the safe use of power tools and building codes, and learning how to read a set of blueprints. Students had to qualify for the class on the basis of completion of previous classes and the recommendations of previous teachers. At the same time the architectural drafting class was holding a contest to see which student's floor plan and exterior drawing would be selected. Then construction began, with three-hour blocks of time set aside for the class.

Throughout the building process business education accounting students recorded and verified building material invoices and inventoried supplies. The industrial arts class constructed the cabinets and installed them. The vocational welding class designed, made, and installed the wrought iron brackets. The homemaking class made the drapes and did the interior decorating, selecting the colors for the paint, tile, and carpet. Special education students planted shrubs and trees, following the recommendations of the landscape architect on the community advisory committee. When the house had been completed, six instructors in four departments had participated. Through team teaching,

the coordination of classes, and simultaneous activities, students were exposed to the overall project and received in-depth experience in a specific field. It was a marvelous opportunity for staff, students, and community advisers to share responsibility, school officials report.

Media Center: Students Learning as Presses Roll; Career Education Materials Produced

The Ceres Unified School District needed some kind of printing facility to produce high-quality career education materials and to duplicate tests and worksheets for general use. The district needed to provide an instructional program for students interested in careers in communications and graphic arts. The solution was that the district created a media center which could do both things—print all the materials that the district needed and serve as an open lab for students.

On the production side the center has a complete offset printing facility which efficiently meets the district's needs by turning out about 25,000 sheets of printed paper a day. (It also has a darkroom and space for an audio-video tape center.) Since it is necessary to finish all orders in 24 hours or less, the center is operated largely by full-time help and part-time advanced students who are paid for their work.

District officials feel that it is very important to be able to take the curriculum materials developed in the district and reproduce them properly. Since today's students are accustomed to high quality in the textbooks, magazines, and other printed materials that they read, it is much more effective for locally produced materials to be of the same high quality. Too often, because of the expense involved, locally developed materials are duplicated with low-quality techniques and equipment, and these inferior reproductions can cause students to react negatively to pilot programs.

On the instruction side about 100 students from five high schools are being trained in typesetting, layout and design, newspaper production, printing, photography, processing of film, pasteup, editing, display, and other communication skills. Students produce their own school newspapers and occasional news and literary magazines.

Media center offerings include five courses in newspaper production, graphic arts, and day and evening programs in publications photography. The courses are also open for adult enrollment in the evening. Students receive classroom instruction weekly at their own school and then proceed to the "laboratory" in the media center. An instructional aide is available at all times to work with them in the typesetting, layout, and pasteup processes.

In the beginning some critics questioned the dual role of the media center, suggesting that production demands would supersede the goal of providing a high-quality instructional program or, conversely, that instructional programs would interfere with the high-speed, efficient production of materials for teachers.

"To suggest that the combination production/instruction effort has been accomplished without problems or without compromise would be untrue," Bernie Knoll, media specialist for the district, says. "But the media center," he adds, "has proved that a combination facility can function at a high operational level, provide a quality instructional program, and do both for a considerably smaller investment in equipment and space than it would take to operate two separate 'quality' programs."

The equipment used in the Ceres Media Center is described at the end of this chapter.

Career Center on Wheels; Minivan Used in Vast San Bernardino County

What has four wheels and a counselor and helps students decide what they would like to do with their lives? It's a mobile career exploration center that covers the 20,000 square miles under the jurisdiction of the San Bernardino County Superintendent of Schools.

The minivan, complete with materials and audio-visual equipment, arrives at a secondary school ready to offer a five-day career search program: day one—conduct self-awareness activities; day two—initiate life-planning process; day three—identify personal interests; day four—explore and identify career clusters; day five—identify three occupations at the desired entry level and the career ladders in that cluster.

The van counselor works in a classroom and integrates the career education program into the existing curriculum. It also becomes an inservice training program for the teacher. On the second day the van counselor involves at least two of the school's counselors in the life-planning process, allowing them to expand their classroom contact after the mobile center is gone.

Project officials say there are four goals for expectations for the mobile career exploration center:

- To make students aware of the basic ingredients involved in an occupational search

- To teach students how to use resources so that they can investigate further if they choose
- To make teachers aware and help develop their skills
- To involve counselors in the career search and life-planning process in the classroom

The initial costs of setting up the mobile center were $5,150 for the minivan and $21,000 for the equipment and materials. Annual costs include $2,400 for transportation expenses and $15,000 for the van counselor's salary and fringe benefits.

The minivan is less expensive to operate than an earlier 26-foot van that the district used for several years until officials decided it was not meeting "the total student needs due to the constraints of a 26-foot van."

Equipment Costs in Media Center

Ceres Unified School District

Typesetting. IBM MT/SC cold type, strike-on composition system, including two MT/ST recording stations and an MT/SC computer playout unit. Acquisition cost: approximately $15,000. Funding sources: Career Education and Regional Occupational Program.

Addressograph/Multigraph Headliner Model 820. Acquisition cost: none (obtained through Federal Excess Properties Program—cost new: $3,600). Comment: This has been a less than satisfactory machine from a production standpoint, and attention should be given to such possible alternatives as Compugraphic Model CG 7200 or Addressograph Multigraph Corporation Set 500 for display or headline type.

Stripprinter headliner. Acquisition cost: $350. Funding source: career education and district funds. Comment: This is an expensive backup machine for display typesetting. Although slow, the stripprinter's low font costs allow purchase of many decorative type faces which can be used for setting up brochures, flyers, posters, curriculum units, advertisements, and so on.

Art and layout equipment. Two drafting tables and two 16′ x 2′ light tables providing 16 student work stations. Federal excess properties provided the drafting tables, and student work stations were constructed at a cost of approximately $500 by the district. Comment: Other art/layout equipment includes such standard items as T-squares, triangles, X-acto knives, steel rules, brushes, waxer, and so on. Cost is nominal.

Prepress production equipment. Brown Model 2000 printer's process camera, Agfa CP 38 photomechanical transfer processor, Brown vacuum frame, Nu-Arc Point source lamp, darkroom sinks, Brown Model 1000 platemaker, plate developing table. Acquisition cost: approximately $6,000 if purchased new. Much of the equipment was obtained through excess properties or was built by the district.

Presses. Heidelberg Model KOR sheet-fed 15¾′ x 22½′ offset press, Multilith Model 2850 systems duplicator, Multilith Model 1250 duplicator, ATF Chief 15 duplicator. Acquisition cost: Heidelberg, $11,900; Multilith 2850, $10,200; Multilith 1250, none (from state surplus). ATF Chief, $1,100 (used).

Multilith Model 2850. This press, though plagued initially by minor mechanical problems, has proved to be a worthy system for high-speed offset duplicating of moderate quality. Its net operating speed of approximately 7,000 sheets an hour on runs of 50 to 100 copies makes it less expensive and much higher in quality than the ditto or mimeograph systems.

Multilith 1250 and Chief 15 duplicators. These are essentially used as student learning stations.

Bindery equipment. Challenge full-power 36½-inch cutter (no cost, federal excess properties); GBC 8-station automatic collator ($150, state surplus); Michael Gather-Eze portable collator ($350, career education funds); Michael Fast Fold tabletop folder ($400, career education funds); Baum 17 x 22 folder ($1,400 used, district funds); Boston No. 7 stitcher (no cost through FEPP); Bostitch twin-head electric stapler.

Chapter 8

Exemplary Practices–Guidance Services

The heart of career education may be guidance, for is it not the essence of career education to help students decide what they want to do with their lives? Career guidance should help students understand themselves and the world in which they live. It should help them understand the role of education and its relationship to society. And it should help them understand their responsibilities and their educational and occupational options.

Therefore, guidance services must be a part of the total concept of career education at all levels. They should focus on helping students to relate their personal attributes to their career goals, to understand themselves and others, and to make educational and occupational choices.

A key person in the career guidance aspect of career education is the director or coordinator of guidance, who assumes the leadership in defining the various guidance roles and functions. Each counselor must be involved in career guidance and work with all categories of students. Classroom teachers can also play a role as career guidance is infused into the curriculum.

As the guidance program becomes part of career education, its services may have to be reexamined and reoriented so that career information, educational planning, and individual appraisal can be current, relevant, and accurate and can lead to wise decisions. Naturally, counselors and others who have guidance responsibilities would be involved in this reorientation process. It would include finding resources in the school and the community and updating procedures for placement and follow-up.

The active collaboration of teachers and counselors in planning activities can enhance their traditional role and lead to a strong supportive partnership for career education.

Career Centers: A Basic Career Education Tool; as Different as a General Store and a Supermarket

Nearly all career education efforts have one thing in common: a career center. In fact, almost every high school in California has a career center, according to a leading national authority on career centers, Thomas Jacobson, Director of Pupil Personnel Services for the Grossmont Union High School District in La Mesa.

What is a career center? It is a special place where a student can go for career information, testing, counseling, or placement–the same four basic guidance services offered by the counselor's office in times past.

"The difference between the two is like the difference between a general store and a supermarket," Dr. Jacobson says. In the general store a person had to ask for a pound of butter or coffee or bacon and someone would go get it. In a counselor's office a student had to ask for scholarship information, a career inventory test, or a college catalog. In a supermarket all of the products are displayed attractively, and customers are urged to help themselves. A career center works the same way.

The emphasis is on self-help, Dr. Jacobson says. The centers are laid out, with appropriate signs and directions, so that students can proceed on their own, as much as possible, freeing the counselor to help students with special or specific problems.

The whole idea is to get the information to where students can use it, according to the *Career Center Handbook* prepared by the California Pilot Career Guidance Center, Office of the San Diego County Superintendent of Schools, and the San Diego Unified School District. In fact, the handbook says, some school districts are taking material out of file cabinets and putting it in plastic dish pans, with each bin representing a specific career cluster.

The information service is a basic and important part of career centers, Dr. Jacobson says. But once they are established, most centers reach out into the school and the community to do much more. Here are some common activities of career centers:

- Publicizing the center and encouraging students to use it. This task is performed through

orientation sessions for new students, brochures and pamphlets, classroom visits, bulletin boards, and so on

- Administering interest tests to students and linking the results, where possible, to work experience programs or job placement
- Bringing in guest speakers to talk about their occupations
- Holding an annual career fair or career day
- Developing curriculum units to help infuse career education into the regular school program

The use of guest speakers is considered to be the most effective activity run by the career centers, and career fairs are the least effective, according to a 1975 survey of 182 career centers in California directed by Dr. Jacobson with the aid of a $40,000 grant from the State Department of Education under the Vocational Education Act.

The survey found that centers vary widely, ranging from simple information centers to centers that form the hub of a formal career guidance program. Most centers try to look as little like school as possible. "Bright colors, casual furniture, stereo music, carpeting, as few prohibitive rules as possible—all add to an inviting environment for students," the *Career Center Handbook* says. "Establishing this easy-going environment will greatly stimulate student use of the center. Of course, friendly, informal, helpful people are the most important factor in establishing a comfortable atmosphere," the handbook says.

Experts say that it is also important for the career center to be open before school, after school, and throughout the day to encourage students to drop in. The center should be located in an area that gets a lot of student traffic—near the lunchroom or student center, for example.

If career centers tend to look homey, it may be because they are often homemade, according to the final Jacobson report, entitled "Study of Career Centers in the State of California." Since funds for centers are often scarce, many have been furnished and decorated with little or no capital outlay. Local service clubs, parents, and students frequently donate money, furnishings, or equipment to the centers and volunteer to assist in painting and decorating.

Once a career center is established, it must have an operating budget for purchasing and updating materials and paying staff salaries. A career center is usually run by a career counselor, work experience coordinator, or career education specialist with the help of paraprofessionals, career aides, career technicians, or student volunteers.

The average yearly cost of a career center in California, the survey found, is $32,469. More than 90 percent of that amount is spent on personnel costs. But experts say this is money well-spent because a career center must be constantly staffed if it is to succeed.

A career center must also have an ongoing program or "it will die like a flower transplanted in the desert," Dr. Jacobson says. "Establishing a career center and filling it with the latest and best equipment and occupational-educational information is not sufficient," the handbook says. "There is no guarantee that students will use the available resources or even that those who do will be able to incorporate the information they learn into their personal planning."

The survey supports the fact that students, left to their own initiative, may not take advantage of a career center's resources. A survey of 1,100 students in 12 schools, done as part of the Jacobson study, showed that 58 percent of them spent fewer than two hours in the career center during the year. Only 22 percent spent more than six hours in activities related to the career center. And one-third of the students who visited a career center usually did so "because they had to" as part of a class orientation, the survey report says.

To be most effective, a career center's staff must continuously create, promote, and improve a wide range of programs and activities, the handbook says. These activities must be aimed at promoting student use of the center, encouraging teachers to use the center as a resource (possibly by providing inservice training programs), and integrating career education into the entire guidance program as well as into the curriculum.

Despite the problems, career centers have "mushroomed throughout the state in the past several years," the survey found, "largely because students seem to be responding favorably to the services provided." The findings of the study show career centers as "a viable career guidance tool."

The challenge for the future "lies not in dispensing information to students," the report says, but in helping students to make better use of this information in planning their futures.

Teachers, Counselors, Parents Talking Same Language; Student Self-Esteem Increased

Aside from television elementary school students get their ideas about life from three main

sources: teachers, parents, and counselors. Therefore, the San Diego City Unified School District decided to see if it could get all three parties to work toward the same goals in building student self-esteem and positive values. To accomplish their ambitious goals, the project team developed and tested 12 curriculum guides in one year: one for each grade in grades one through six; individual guides for counselors, teachers, and parents; and separate guides for language arts, social studies, and math.

"Since we didn't want to have these guides sitting around on shelves, we also developed an inservice system for teachers, counselors, and parents," Chris T. Chialtas, project director, says. When the program was pilot-tested with 270 children at one elementary school in 1975-76, parents were brought in for a series of three meetings and other individual contacts later. "It was important for parents to understand and support what were were doing so we wouldn't get in a situation like new math did," Dr. Chialtas says. "Students learned modern math in school, but when they went home it was chaos."

At the inservice sessions project staff explained to parents that the program would be working in three main areas: values clarification, decision making, and self-concept. Parents were told how important it was for teachers and counselors and for them as parents to talk the same language to children. And parents were given materials and shown how they could use them at home to reinforce what was happening in school. "Parents were very supportive all year, and many said they never knew that it was possible for this kind of thing to happen in school. They were delighted," Dr. Chialtas says. Evaluation done by a third party also showed that students made significant gains in the three areas stressed, he says.

The program, which operated under a $43,016 grant authorized by the Education Amendments of 1974, was expanded to three schools in 1976-77 with a second-year grant of $51,000. Tentative plans call for going districtwide in 1977-78. San Diego's elementary school counseling project is one-half of its major career education program—the affective half. It is designed to complement the instructional half, known as Project CHOICE (which is described in Chapter 6 of this publication). The materials for both are cross-referenced so that teachers who are working with Project CHOICE can make the counseling aspect an integral part of what they are already doing.

"I think we are showing what can be done in diffusing the counseling function through the schools and in making sure that teachers, counselors, and parents are all playing the role of good guidance," Dr. Chialtas says.

Homeroom: A Good Spot for Career Education; All Students Reached

If a junior high school has only one counselor for every 500 students, what can be done to reach all the students? This was the problem faced by the Westborough Junior High School in the South San Francisco Unified School District when the school opened in 1969. School officials considered the alternatives and rejected a career center because they felt that too often these centers are used only by the self-motivated students who least need personal career counseling. They wanted to find a way to reach all students in the school.

Their solution was to use the homeroom and to involve homeroom teachers in guidance activities. Therefore, when the school decided to develop a career education project in 1973, school officials looked to the natural spot, the homeroom. They began a program in the fall of 1974 involving 915 seventh, eighth, and ninth graders in 35 homerooms. A control group of matched students was selected at another junior high school.

Their solution was to use the homeroom and to involve homeroom teachers in guidance activities. Therefore, when the school decided to develop a career education project in 1973, school officials looked to the natural spot, the homeroom. They began a program in the fall of 1974 involving 915 seventh, eighth, and ninth graders in 35 homerooms. A control group of matched students was selected at another junior high school.

Despite all the guidance efforts that had been made previously, a needs assessment survey given to students in the project showed that:

- Occupational information was not readily available to students, and the materials which did exist were written in a technical vocabulary that was inappropriate for junior high school students.
- Many students did not feel that the courses they were taking in school had any relationship to the world of work. For example, they frequently indicated that English and math had no practical value to them.
- Although 70 percent of the students said that they were planning to go to college, many did not know the difference between a commu-

nity college and a university and did not know the basic entry requirements for either, even requirements related to their own career choice.

- Of the ninth graders surveyed, 34 percent were entering high school without any career goals or ideas about kinds of occupations that might be appropriate to their interests and aptitudes.

With this discouraging picture in mind, the homeroom program seeks to provide educational activities that will encourage students to learn about career choices and educational opportunities, evaluate realistic career options according to a self-assessment of abilities and interests, and begin career planning.

Therefore, the activities do emphasize self-assessment, using values clarification, interest surveys, aptitude tests, and so on. Material is presented sequentially, beginning in seventh grade, so that a student will be able to select a minimum of one or two tentative career goals by the end of ninth grade.

Resources for the program include a project coordinator, clerical help, instructional materials, audiovisual equipment, and storage facilities. The homeroom teachers receive preservice and inservice training on the testing program and other materials that are used. Also, the 36 teachers in the project school evaluate the effectiveness of each unit after it is presented. The project has also produced student workbooks, teacher manuals, and self-assessment booklets.

"I think results will show that we are extremely successful in meeting our objectives," Louis Goins, project director, says. "We feel we are establishing a practical program which can be implemented by any junior high school." The evaluation form used by the project's teachers is presented on the next page.

Career Planning Course for Ninth Graders; Interests and Aptitudes Identified

When ninth grade students come to Saddleback High School, unsure and undecided about the future, they get some help—an 18-week career planning course. All ninth graders in the Santa Ana High School are required to take the course so that all incoming students establish tentative career goals. They also draw up a plan which identifies the courses that will help them reach their goal. That plan becomes the basis for scheduling students every semester.

The career planning course is divided into six three-week units:

- Personal assessment for career exploration, which helps freshman students identify their own interests and aptitudes
- Introduction to careers, which gives an overview of the career clusters
- Career research, which gives students an opportunity to gather information about the career opportunities that relate to their potential
- Educational and career planning, which assists students in exploring the possible ways of achieving their tentative career goals
- Preparation for employment, which familiarizes students with the knowledge and skills they must have to get a job
- Miniunits on specific careers

The miniunits are taught as a cooperative team effort by career education teachers and career counselors, and each one specializes in only a portion of the total course. For example, the counselors teach personal assessment and education and career planning. Three units are taught at one time, and the classes rotate every three weeks.

The cost of implementing this course for 700 students was much less than one would normally expect for starting a new program involving so many students. The primary reason was that a textbook was not used for each student, Robert Nelson, coordination of career education at the school, says. He notes that the only expense was caused by the purchase of equipment and materials for the school's career center.

Evaluation shows that the career planning course has produced greater cooperation between teachers and counselors; a greater flow of "drop-in" visitors to the career center and counseling center; and improved parent awareness of school programs. Evaluation efforts will continue to measure the long-range benefits of the course.

"Common Denominators" for Career Guidance; Competencies Specified at Irvine

There are certain basics of career planning that all students need to know—common denominators so to speak—that apply equally to all. Using this idea, the counseling staff at University High School in the Irvine Unified School District developed what it calls a denominator-based model for career guidance. Competencies that students should have

at each of the four high school grades are specified. For example, all ninth grade students are expected to be able to research information about careers. Therefore, they may be given the task of going to the career resource center and do research on three careers.

The key to the model is that blocks of time are set aside for the students to concentrate on career guidance. In the ninth grade, as part of social studies, for instance, they are given a three-week orientation about the school and the staff—whom to go see for what. They meet the four counselors and

Evaluation for Sequential Homeroom

The rating scale used by the teachers at the Westborough Junior High School includes students' affective reactions as well as the teachers' personal reactions toward every unit presented. These reactions are tallied on a chart for every filmstrip, self-assessment unit, occupational information unit, and so on as they are presented.

Teacher_____ Grade _____
Homeroom Materials _____

Teacher Evaluation

After you have finished the attached unit in homeroom, could you briefly check your feelings about the materials and drop it off in 10A.

Student Reaction

Receptive
Neutral
Disinterested
Disliked
Too difficult for grade level
Not sophisticated enough for grade level
This particular group doesn't respond well to this kind of material.

Time Allotted for Unit

Satisfactory
Too long
Too short

Your Reaction

OK to use again
Don't use next year
Liked material
See no value in material
Teacher instructions not clear
Student instructions not clear
I am personally uncomfortable presenting this kind of material.

Other Comments

_____

_____

A record is also kept of every individual request for occupational or educational information made by students in the program. Whether the information requested was supplied to the student is indicated. In the first year of the program, more than 2,500 individual requests for specific career briefs were received, and 98 percent of the requests were met.

find out that each has a specialty, such as college information, career education, curriculum, or personal and social development. (The counselors may change their specialties each year and can cross over to help each other.) The ninth graders spend most of the three-week period in the career resource center, where they complete a 24-page workbook and a career interest inventory. The format is advanced for sophomores, who are given a two-week program, and again for juniors, who are also given a two-week program.

When this guidance project started in 1973, most of the teaching was done by the counselors and the career technician, who is always available at the center. However, after watching the counselors at work in the center and in the classroom, many teachers are now doing the units themselves with the counselors as consultants.

There are other aspects of the career guidance program which make certain that career education does not stop when the three weeks or two weeks are up. There are teacher activity packets, which aid teachers in implementing career education units in the classroom, including bulletin board materials. Individual student activity packets are also available, organized by interest and developmental level. By using these packets, which include filmstrips and inventories, students can work at their own pace.

There is a "department of the month" program, which highlights careers in each department as well as individual teachers, guest speakers, and study trips. Peer counselors and community advisors are also available. Everything a student does related to career guidance is placed in a student career folder that is kept by a career technician. These folders can be used by teachers, counselors, parents, and the students themselves to chart progress and to keep students from having to duplicate efforts.

The project is evaluated on forms that are sent to students, teachers, and parents at the end of each activity. The results have been good, says James Chapman, career technician. "The catalyst which makes it work," he says, "is the team approach with counselors and the career technician working together with teachers to reach every student."

After watching the program work with 2,000 students over three years, Mr. Chapman says it has given students an awareness of the world of work and has shown them what is required for careers and the skills they will need to meet their goals. It has helped them plan their high school courses to meet their goals, "and it has definitely helped them make decisions and evaluate their values," he says.

The counselors say that it has cured some of the ills they had before the program began. It has allowed them to use their time more efficiently and to be more effective. It has also reduced an emphasis on "crisis counseling."

Career Development Plan in San Bernardino; Students Guided in Grade Nine

Career guidance plays a big part in the life of every ninth grader in the San Bernardino City Unified School District. First, every student, as part of social studies, takes an occupational unit ranging in duration from a quarter of a semester to a full semester, depending on the teacher. In this unit the students are involved in typical self-evaluation activities, exploring their own interests and possible careers. They may also go into the community and talk to employers in an effort to reach a decision about careers that the students might be interested in.

Toward the end of grade nine, a school counselor sits down with each student to outline a career development plan, and the student sets a career goal by identifying one of the 15 career clusters or a specific career. The plan spells out what kind of education the student will need, both in high school and beyond, to meet his or her goal. And it lists exploratory activities the student might use to investigate the selection further.

If students are still undecided about a possible career when it comes time to draw up their plans, they go to the career guidance center for further interest tests and assistance from counselors and the career technician. In addition, all San Bernardino high schools have a display terminal tied into the central office computer which can give students practically any kind of information they need. After the students reach a decision, they go back to the counselor to draw up their own career development plan.

The plan becomes important to students as they schedule their classes in the semesters ahead because the San Bernardino school board requires all students to have 30 units, or six semesters, of career development to graduate. To meet this requirement, students can take specific skill courses, adult education courses not offered in the high schools (if the student is sixteen years of age or older), or any course that is related to their career goal. For example, someone who wants to be an engineer can count math classes, and those looking

to medicine can include science courses in their 30 units.

To evaluate the program, those in the career guidance centers keep track of the number of student visits. In 1975-76, with 7,000 high school students, there were 28,000 visits, Ralph O'Brien, Director of Pupil Personnel Services for the district, says. About 20 percent of the students came to take interest tests, about 30 percent dropped by to hear a community speaker or see a film, and most of the rest wanted occupational information of some kind. "Since students are not required to come to the career guidance centers, we think that this response is very good," Mr. O'Brien says.

In addition, the program has led to a reevaluation of the counselor's role, and all counselors received inservice training to help prepare them for the new approach.

Occupational Planning Sheets in Santa Barbara

If a student decides that he or she is interested in a specific occupation, where does the student go from there? To make that question a little easier for career counselors to deal with, the Santa Barbara City High School District decided to put together occupational preparation sheets for specific careers.

For example, a planning sheet describes what is involved in a particular job and what aptitudes or interests are appropriate for someone who is considering it. The sheet lists high school courses that would be applicable, further schooling that might be needed, and institutions in the area that offer it. The sheet also outlines related occupations and advancement positions.

The occupational preparation sheets were put together by a career planning research technician who used a variety of sources, such as:

- *Dictionary of Occupational Titles*, published by the U.S. Department of Labor
- *Vocational Education and Occupations*, published by the U.S. Department of Health, Education, and Welfare
- *Occupational Guides*, published by the California State Employment Development Department
- Information on specific occupations in books, pamphlets, and brochures
- Information provided by professional and trade associations
- College and trade school catalogues
- Interviews with local school personnel

School counselors say that they have found the occupational preparation sheets to be most helpful. Two samples are presented on the next page.

Help for Undecided College-Bound Seniors; Cooperative Program in Covina-Valley

Realizing that most high school students enter college with little or no idea of what they would like to do with their lives, the Covina-Valley Unified School District developed a cooperative guidance program with nearby Mt. San Antonio College. Since more than 40 percent of the graduates of the district's three high schools attend this local community college, the decision to cooperate was a natural one.

The district and the college faced the fact that many students enter the college with few clear ideas about what should be their major area of study or what specialized technical program might be most appropriate. They also knew that these students were inclined to drift from one program to another or to drop out altogether.

Therefore, they decided to give the Career Planning Program developed by the American College Testing Act Program to about 400 seniors who were planning to enroll in the community college. Many of these students were undecided or uncertain about the majors or programs in which they might enroll, but they were willing to devote three and one-half hours of their time to the extensive aptitude and interest testing involved in the Career Planning Program.

After the testing was over, each student was provided with a computerized profile and report of test results. The report identified eight career clusters in which the student showed high interest, competency, or aptitude. Each student was also given an ACT career planning booklet that was helpful in further interpretation of profiles. It also included information on interviews with community college counselors.

Before the end of the 1973-74 school term, the college counselors visited each high school campus to assist students in making selections of majors and special programs that were in accord with their profiles and test results. Each student was provided an opportunity to make a choice and was scheduled for a follow-up appointment with the counselor at the college campus in the fall.

The students who participated in the guidance activity were given an opportunity to evaluate the experience and the extent to which they felt their interests were served. Their ratings were 65 percent

to 85 percent positive in each of the eight categories included on the rating scale.

This guidance program provided a basis for close cooperation between the three high schools and the community college. Although the ACT was not offered again because of the cost involved, they are still continuing to cooperate, Martha Evans, project developer, says.

Home Appliance Servicer

Related and advancement occupations: Can become supervisor, service manager, salesperson, instructor. Or can start own repair shop.

Job description: Installs, maintains, and repairs electrical and gas-burning home appliances, such as refrigerators, ranges, laundry equipment, furnaces. Finds cause of trouble; cleans, repairs, or replaces defective parts. May drive truck, make home calls, and give estimates.

Aptitudes and interests: Aptitudes include mechanical ability, manual dexterity, tact, courtesy, problem-solving ability. Interests include desire to know what makes mechanical objects work and enjoyment in working with hands and meeting and dealing with all kinds of people.

Course preparation: Electricity/Electronics 1 and 2 and Advanced; Drafting 1 and 2; Machine Shop 1; speech; science background (physical science; physics); math background (algebra; trades math; senior math); English background (practical English; writing skills).

Related electives (high school): Introduction to marketing and merchandising; business management; work experience.

Further study: High school graduation is the first step. Advanced training at a trade school or junior college increases employment opportunities. Otherwise, a long period of on-the-job training is required.

Location of further study: Bakersfield College; Contra Costa College; San Diego City College.

Carpenter

Related and advancement occupations: Can become supervisor, contractor. Can do freelance jobs for homeowners.

Job description: Erect wooden framework of buildings; install doors, stairs, floors, and wooden trim. Construct forms, sheds, and other wooden structures. Repair items made of wood or similar material. May specialize in one area of carpentry.

Aptitudes and interests: Aptitudes—manual dexterity, mechanical aptitude, physical stamina, and coordination. Interests—liking for outdoor work, enjoyment in working with hands and with wood.

Course preparation (high school): Machine Woods 1 and 2; Woods 3 and Advanced Woods; Drafting 1 and 2; Architectural Drawing 1 and 2; physical science; speech; physical education (strength and stamina skills; physical conditioning); math background (senior math; informal geometry; trades math); English background (practical English; writing skills).

Related electives (high school): Work experience.

Further study: High school diploma is desirable. Apprenticeship and on-the-job training must be undertaken. Further study at a junior college or trade school is helpful in advancing employment opportunities.

Location of further study: Long Beach City College; Fresno City College; Hartnell Community College; Porterville College; Taft College.

The district's career education office was phased out in the summer of 1976 because of a lack of funds. Does this mean the end of career education in Covina-Valley? Not at all, Mrs. Evans says. She is confident that all of the Covina-Valley career education programs described in this publication—the career objectives in the job performance plans, the career learning experience units, the course of study for adult education, the elementary school self-awareness guidance program, and the high school and college cooperation—will continue.

"Once you change people and the way they do things, you don't have to be there to push them all of the time," she says. Although she realizes that some people may slip back without administrative pressure, she believes there are enough committed people in the programs to keep the programs going.

"We set out to make teachers and students much more aware of career education, and they have become much more aware," she says. "We had a job to do, and we did it."

Career Planning Centers in Rancho Santiago; Life-Style Recognized as Important

The difficulties of selecting a career and then finding a job have been compounded by inflation, the energy crisis, and high unemployment, particularly in urban areas. Facing this fact, the Rancho Santiago Community College District in Santa Ana decided to try to do something to help.

Their contribution was to create two career planning centers. One is adjacent to the Counseling Center on the Santa Ana College campus and operates as an integral part of the college's total guidance program. The second is part of the Career Education Center, an adult education facility.

The goal of both centers is the same; that is, to provide specialized assistance that will help individuals select a viable career pattern, receive training in their career areas, apply for a job, and know what to expect during a job interview. The centers follow a logical procedure of assessment, diagnosis, prescription, action, follow-up, and evaluation. They also look at the whole decision-making process and recognize leisure time and life-style to be important ingredients in any career decision.

The centers were begun in 1973-74 with funds from the Vocational Education Amendments, Part A. In the following year the operation of the centers was absorbed by the district. Supplies, materials, and equipment were paid for by the Orange County Consortium Career Education Project. (The Rancho Santiago district is part of this consortium, which is described in the curriculum development chapter of this publication.) In 1975-76, the third year of operation, the centers' services and programs were expanded to involve various areas of instruction and the business community.

The centers are evaluated periodically. Monthly reports are prepared on how the centers are being used and what is happening to the students and adults who participate. Evaluations show that the centers are a "key ingredient in assisting students in the decision-making process," district officials say. They believe the success of each center has rested on the selection of qualified counselors with extensive experience in the decision-making process and in career planning. Coordinators for each center were selected on this basis, and they helped provide inservice training for the rest of the counseling staff.

Computer Assistance in Monterey; Individual Characteristics Matched

Counselors have a tough job—trying to match an individual's attitudes and aptitudes with the traits needed for particular occupations. The job requires more time than the counselors could possibly have and a wide-ranging knowledge about occupations that is almost staggering.

Deciding that such a task was just about humanly impossible, Monterey Peninsula College called in man's favorite "friend" these days—the computer. A computer-assisted career research survey was developed that matches individual characteristics with worker trait requirements for 100 occupational clusters comprising 23,000 occupations. The 100 clusters were selected from 114 in the *Dictionary of Occupational Titles*, published by the U.S. Department of Labor.

Profiles of the job qualifications for each of the 100 clusters were prepared. The profiles include such information as the levels and kinds of aptitudes, interests, temperaments, physical capacities, physical working conditions, and the average career preparation time necessary for a successful job performance. Students are asked to provide this information by answering 38 questions on a self-assessment inventory.

The student's own assessment of his or her aptitudes, interests, and so on is then compared with an average of successful people in each occupational cluster, and this information is reported in a computer printout. At present a

counselor has to be available to help explain the printout to the student, but a small interpretation manual is being prepared that will explain the system in detail.

The next step for the student is to get more information about the occupational clusters listed on the printout because these have been selected as the most appropriate for his or her individual characteristics. To make this search easier, the college has prepared separate handout sheets for each cluster, reprinting a description of the cluster as it appears in the *Dictionary of Occupational Titles*. The description includes the work performed, worker requirements, clues for relating applicants and requirements, training and methods of entry, and related classifications. On the other side of the handout, a student can find the job qualifications profile developed by the college.

All of these handouts, which are color-coded according to the disciplines of the college, such as business, social science, and so on, duplicate the color coding used for other occupational information published by the college. The handouts are also placed in racks in the lobby of the Counseling Center, where they are easily seen and readily available.

College officials are enthusiastic about the program. They point to these advantages:

- The inventory is easy to use and is self-administered. General instructions introduce the inventory, indicate its purpose, and explain the mechanics of responding on a scan sheet. The inventory can be completed in about 20 minutes or less and can be taken on or off campus because it is self-administered.
- The program is relatively inexpensive. It can, therefore, be more easibly absorbed into the regular guidance program. The cost of the printout is about $1 per copy for 40 seconds of computer time. Little staff time is involved.
- It is not necessary to have special training for the staff or to purchase special equipment.
- The information system is flexible enough to meet the career information needs of diverse community college publics.
- The pilot project has been positively received by administrators, faculty, and students.

College officials believe that the computer-assisted system will be very useful to college students, high school students, and nonstudents who are seeking career guidance because it can provide them with specific, relevant information. They also think it will be useful to students who are trying to change careers, especially veterans, women, and members of minority groups.

Counselor Aides Used in Los Angeles; Peer Identification Provided

Using minority college students as aides to school career guidance counselors can substantially improve guidance programs in areas which have large numbers of low-income and minority students, a Los Angeles program has found. The program, a joint effort of Los Angeles City College and the Los Angeles Unified School District, has shown that these aides can provide the ethnic and other peer identification necessary for effective guidance, says Robert Pollyea, director of the project and assistant dean of counseling at the college.

The primary purpose of the project is to improve guidance services for low-income and minority students. However, it also has a long-range goal: to show minority college students that there is a great need for more minority school counselors and to encourage them to consider a career in counseling. Two of the 14 counselor aides who were part of the first group of career guidance aides in 1972-73 are now studying for such a career, Mr. Pollyea says.

The program has continually expanded. Twenty-two career guidance counselor aides worked in 22 schools in 1975-76. Two counselor aides were placed in the Duarte Unified School District in 1975-76, and further expansion is planned.

The pattern for the program was set by the original 14 aides—eight men and six women. They ranged in age from twenty to thirty-eight and averaged twenty-six years of age. There were six blacks, three Asians, two Mexican-Americans, two Middle Easterners, and one Caucasian.

Two aides were hired to assist junior high school counselors, four to assist high school career counselors, and six to assist in following up on severe student absence problems, using the telephone, and making home visitations. One aide worked at the elementary level, and one was a traveling counselor for children who attended public schools but lived in institutions. All aides were placed in schools serving minority group students or with those in ESEA, Title I, programs.

Regular monthly inservice training meetings were held with all aides and were planned to include specific objectives. These sessions were evaluated by the aides to determine whether objectives had been met and how useful the

meetings had been. Meetings were also held with the counselors who supervised the aides.

The counselor aides reported spending a great deal of their time in career-related activities. The attendance rate for students served by the aides improved during the year. The aides were viewed positively by students, although the students felt that the aides under thirty years of age were more interested in them than were those over thirty. The aides were also viewed positively by most counselors. In the beginning some counselors felt threatened about losing their jobs to the aides, but the counselor came to see that the aides were helping them do a better job, Mr. Pollyea says.

The counselor aide program has been very successful, Mr. Pollyea feels, in meeting its original goals and in enabling training institutions to review their programs for relevancy. Although the aides were hired with federal funds in the beginning, they are now regular employees of the Los Angeles Unified School District.

The program was selected as the model for the state in 1975 by the California Personnel and Guidance Association, and Mr. Pollyea feels the program may become a national model for training paraprofessionals.

Career Guidance for Adults in San Bernardino; Center Open in the Evening

The San Bernardino City Unified School District decided that it is not enough to offer adult education programs but that it should offer career guidance, too. Therefore, the district has opened one of the career guidance centers in a high school to adults two nights a week. The district does not offer a class but simply an opportunity for adults with career problems or questions to stop by and get information. About 650 adults came to the Adult Career Guidance Center in the second semester of 1975-76—a good enough response to warrant keeping the program going, Ralph O'Brien, Director of Pupil Personnel Services for the district, says.

Adults seem to have two main needs. First, they want advice about their quest for a high school diploma, about the scheduling of adult classes, or about occupational planning. Second, they want to assess their abilities and interests related to occupations. An attempt to bring in adults to hear community speakers and to participate in more general activities was not as successful, Mr. O'Brien says, because most adults have one goal, to get a job.

Because all high schools have career guidance centers, it was important to choose the one that would be most accessible to the community. That decision was made by an adult education committee, which was also responsible for staffing the center at night and selecting occupational information that would be appropriate for adults. The adults also use materials already in the center and have access to all the occupational information in the district's computer.

Cost of the adult career guidance center is about $5,000 for staff and $1,000 for materials per year. It was also necessary to give inservice training to the staff in working with adults and using community resources. "We are convinced," Mr. O'Brien says, "that it is an important part of adult education to provide this kind of support."

Chapter 9

Exemplary Practices–Community Involvement

The community can play two very important roles in career education. First, it can provide support for the whole concept. The support is especially important when career education is being introduced into a district. Second, the community has resources and talents which can enhance both curriculum content and instructional methods.

In its first role as supporter and promoter of career education, the community is essential because any change in education requires support from inside and outside the school. Educators can win community support for career education by meeting with community members individually or in groups, by talking to them about career education at social functions, and by appointing ad hoc committees from the community. These committees can be very helpful in planning orientation or information meetings for other community members. There should also be a cadre of school and community persons who are recruited and trained to act as liaison personnel in carrying out activities designed to win community support for career education.

The community's second role–as a resource–is perhaps better known. Some districts already take advantage of potential community resources through work-study programs; the use of surplus materials; and the use of volunteers as speakers, paraprofessionals, lab assistants, or library aides. However, career education involves refining and expanding the old ideas and making maximum use of available resources.

One of the best tools for expanding the use of community resources is to appoint community advisory committees–not as "window dressing" but as working committees that can suggest work-related experiences for students and can open doors to community people and places. Committee members also can help in drawing up plans to be presented to various agencies, organizations, businesses, and individuals. School personnel should maintain frequent contact with committee members to solicit their help in planning, coordinating, and evaluating career education.

As more students are sent out into the community, more community residents should, in turn, be encouraged to visit the classrooms. Too often, schools are isolated from their communities even though each resident has a considerable financial investment in the school system. To be accountable to the community and to be of greatest value to its residents, schools must use community resources as a way of merging educational theory with real experiences. Schools must also be alert to emerging community needs and to the community resources that can assist in meeting those needs.

The community partnership of business, industry, labor, the professions, and education can be effective in providing maximum educational opportunities for each student. Career education provides the framework for enhancing guidance and instruction by using this community partnership.

Businesses Visited by Teachers and Counselors in Los Angeles

Everyone knows that teachers and counselors involved in career education have to stay in touch with the working world to be effective. Anyone who has tried to do so knows how difficult the attempt is. The Los Angeles Unified School District has come up with one solution–the Business and Education Exchange Program (BEEP). The program makes it possible for teachers and counselors to spend about one day every two weeks in an area business, picking up information on trends and opportunities in the working world that they can share with co-workers and students.

Visiting the same business over a period of five to ten weeks, the participants are encouraged to analyze the mission and structure of the company, learn about its hiring policies and procedures, and become aware of its vertical and horizontal career opportunities. The program experimented with the idea of having participants visit different companies but found that the teachers received only

"cosmetic, public relations introductions to companies" that way, says Robert Sampieri, Coordinator of Comprehensive Career Education for the district.

More than 165 different organizations have agreed to host BEEP visitors. In 1975-76 there were 181 such visitors. In the previous year 90 teachers and counselors were placed in 85 area businesses. Prospective visitors attend a previsit orientation session to discuss the goals of their visits, ground rules for scheduling, and plans for using the information they gain. Employers are sent an outline of expectations of BEEP and information about the participants. Personal contact is made by the project coordinator. At the completion of the visits, a "debriefing session" is held in which teachers and counselors are brought together from many different schools to share their insights and plans for the classroom. Mr. Sampieri reports that both teachers and guidance staff have found BEEP to be a valuable and stimulating experience.

Actually, BEEP was originally conceived as an exchange program between school and business personnel which would not only place school staff in businesses but would bring business people into the schools to see how academic subjects and career information are presented. In practice, however, the flow of business people into the schools was limited and usually only occurred as a result of personal rapport between a school staffer and a business employee, Mr. Sampieri says. The original project was operated by the district and the Los Angeles Area Chamber of Commerce in 1973-74. Under it, some 50 teachers and counselors visited businesses one day a week over a ten-day period. The chamber also cosponsors BEEP.

Coordination of Services in Contra Costa County; Counseling by "Outside" Professionals

Because cities or counties quite often duplicate services in their various departments, Contra Costa County decided to attack this problem with an Allied Services Project that would coordinate and integrate related (allied) services. The project involved eight county agencies and the Richmond Unified School District.

Prior to the start of the project, several agencies had been trying to help youths who had dropped out of school, had been frequently absent, or had been searching for career alternatives. Under the project four county departments contributed five staff members for one day a week to the Richmond Unified School District's Career Education Program in an effort to coordinate these youth services.

The five staff members came into the schools as surrogate counselors—a unique aspect of this program. The five "outside" professionals were a social worker and vocational counselor from the Social Services Department, a social worker from the Medical Services Department, a juvenile probation officer from the Probation Department, and a psychologist from the Community Mental Health Program.

The project, conducted at Walter T. Helms Junior High School, involved 275 seventh and eighth grade students as participants. A team was formed, consisting of the five outside professionals, six teachers, the principal and vice-principal, and one counselor-coordinator. The teachers, all volunteers, were especially trained to present their subject matter from the point of view of students' career interests.

The counselor-coordinator worked with the teachers, arranged for visits by resource people, organized study trips, set up a career resource center, and coordinated the assignment of the outside professionals. All members of the team participated in orientation and inservice meetings designed to clarify individual responsibilities and set ground rules for the project.

The outside professionals have been used in many ways. For example, they make presentations to classes, recommend and arrange for study trips, provide liaison with community agencies, participate in inservice training sessions for the career education team, counsel students individually or in groups, assist teachers in curriculum development, act as resource persons in the career center, help screen students, assist in program evaluation, and tutor students with special problems.

The project was begun in 1973-74 under a grant authorized by the Vocational Education Act, Part C. The district supported the project in 1974-75. It is now coordinated by the vice-principal as part of her regular duties.

School officials say the project has made them "exceedingly conscious of the usefulness of outside professionals in assisting both regular counselors and those who are implementing career education." They believe it is a "mutually rewarding experience" in exchanging ideas and supplementing counseling services for students.

They suggest this project as a model for districts that are trying to make maximum use of limited

staff, available facilities, restricted budgets. They advise all outside professionals be brought to the school at the same time each week for the most productive results.

Certificate of Competency in Los Angeles "Reality-Based" Training Program

Is there something better a student can show a prospective employer than an *A* on a report card? The Los Angeles Unified School District thinks that maybe there is. It uses a certificate of competency signed by a professional in the field attesting that the student has mastered certain skills.

This approach is much more "reality based," says Robert Sampieri, Coordinator of Comprehensive Career Education for the district. It's facing up to the world as it is.

One way that the district provides these certificates is through its Competency-Based Career Experience Project (also known as the Demonstrated Performance Skill Program). When the project was tested in 1974-75 in three high schools, 60 students were placed in work sites for sessions ranging from two to six weeks.

The project has been so successful that business and industry have requested the district to appoint a committee to draft legislation encouraging company participation through financial incentives. "We are now exploring the financial implications and believe that the tax credit approach might make it happen," Mr. Sampieri says.

During the initial year, 60 occupations were selected for model contracts—occupations not normally taught in schools. Emphasis was placed on developing formal agreements between area businesses and schools, defining the skills to be acquired by students and setting levels of mastery, drawing up guidelines for on-site instruction, and providing on-the-job supervision and teaching.

In each of the three high schools involved, a different staff member (a guidance counselor, a work-experience coordinator, and a career adviser) was in charge of placing, monitoring, and evaluating the 60 eleventh and twelfth graders testing the concept. The first year produced valuable information on:

- The kinds of schedules that work with students
- The degree of cooperation that can be expected from teachers and the kinds of incentives that foster cooperation
- The degree of cooperation between employers and employees at work sites
- The kinds of skills that are teachable in a short work experience
- The feasibility of group work placements
- The kind of counseling support needed by students

To develop long-range relationships with area businesses, the staff relied heavily on an advisory committee made up of school administrators and business people. The committee assisted in making critical decisions about what kinds of skills would be taught and how employers would help youngsters learn these skills. The committee was divided into task forces to advise on definitions of competence, site recruitment, and the matching of student and site. Committee members learned that they must make distinctions between entry-level job skills and sets of skills that can be considered preprofessional. They also learned that students will sometimes discover that their interests are not deep enough or suitable for continuing study as a possible career and that employers need assistance in how to teach the required skills.

Although the 60 model contracts do not offer enough variety in work experiences, many more contracts will be developed as the program expands to additional schools and further recruiting broadens placement opportunities, Mr. Sampieri says. The program has had an additional benefit: It has helped administrators and teachers who resist the breaking down of classroom walls and the use of different options for students to learn.

Volunteers to Implement RISE Report in a Santa Barbara Junior High

One Santa Barbara junior high school is going to try to put the recommendations of the state's Commission for Reform of Intermediate and Secondary Education (RISE) into practice in 1976-77, using at least 2,500 community volunteers and not a penny in additional school funds. The bold move is being undertaken by La Colina Junior High School in the Santa Barbara City Elementary and High School Districts under the leadership of Charles Brady. He directed the district's Career Education Program until his $155,000 annual budget was eliminated in a financial crisis.

By following the RISE recommendations, with their emphasis on career education, the 1,500 students at La Colina will still be very much

involved in an education tied to career objectives. Thanks to the community volunteers, the students will be able to follow some of the recommendations of RISE, such as learning options outside school, "furloughs," extensive opportunities for career exploration and preparation, and job placement.

Of course, teachers must have the desire to use the community and the knowledge to know when and how to do so. About 25 teachers at La Colina volunteered to help get the program off the ground. Mr. Brady expects that all 100 teachers will be involved by the end of the school year when they see how much "easier" it will be to teach by using the community to help motivate students and make learning more relevant to life.

Mr. Brady hit upon the idea of turning to the community for several reasons. First, he saw no other means because traditional community support for the schools was at an all-time low after two tax override proposals and a bond proposal had been rejected by voters. Second, he had had much experience in dealing with community volunteers through a district volunteer association of 700 persons. He knew that individuals and service clubs were willing to give time and money for programs which they felt would benefit the community.

So that donations of money, equipment, or supplies could be legally accepted, a nonprofit corporation called Community Involvement in Education (CIE) was formed for the La Colina project. CIE now has a board of seven directors. It will be expanded to 20 members when all 2,500 volunteers have been recruited.

Mr. Brady has found a great deal of support from chambers of commerce; service clubs (for example, six Kiwanis clubs are involved in CIE); banks; and other businesses. They have already donated money (such as $300 for the incorporation fee); a nine-passenger minibus for transporting small groups of students; and volunteers to paint the bus and put it in working order.

Why does CIE need so many community volunteers? "If a kid wants to be an engineer and doesn't think algebra is important, he has to be able to visit an engineer once or several times to find out how important algebra is," Mr. Brady says. "But if a kid wants to be an animal trainer, we have to find one of those, too. If 500 students are interested in some occupation relating to the ocean, we have to find enough people who are willing to talk to students in small groups. Actually, 2,500 volunteers may not be enough."

This massive use of community volunteers grew out of an organization of school volunteers called the VIPS Association, which originally stood for Vocational Instruction in Public Schools. Its 700 members serve on about 25 advisory committees representing different career clusters. In addition to standard clusters, like manufacturing and motor vehicle repair, there are advisory committees for such occupations as aeronautical science, drafting, ornamental horticulture, quantity food preparation, landscape management, and graphic arts.

"We expect advisers to work; they don't just go to meetings," Mr. Brady says. For example, students built two houses in 1975-76, and the advisers worked right alongside the students and teachers "doing whatever it took to build the houses," he says. Members of VIPS also assist in developing courses of study, preparing equipment lists and budgets for proposed programs, placing students, and putting on workshops for university credit.

Volunteers staff career information centers at three junior high schools from 8 a.m. to 3 p.m. daily during the school week. They also assist in creating "career corners" or learning centers for teachers of specific subjects like mathematics, English, science, and social studies.

The district advertised for volunteers through newspapers and radio and will do so again; but a more effective practice, Mr. Brady says, is to have the career information specialist personally recruit volunteers by contacting service clubs, church groups, chambers of commerce, PTA groups, and organizations of retired teachers and other retirees.

The district "advertises" for students by means of brochures that tell students about the career information centers and encourage them to use available career guidance services. These brochures are handed out to students, parents, and members of service clubs "to let them know we have career guidance," Mr. Brady says.

Industry-Education Councils Promote Learning; Statewide Effort to Validate Curriculum

For several years the many local industry-education councils around the state have provided a way for business, industry, labor, and government to recognize outstanding teachers and students. It was a nice but superficial contact between business and industry and the schools.

Within the past few years there has been a radical change in the industry-education councils. With the advent of career education has come the recognition that business and industry need to be

major partners with the schools because "the schools can't do it alone without help," says Kaare Jacobsen, executive manager of the Industry-Education Alliance of Los Angeles County. "The councils are the vehicle for making it happen."

It all starts now at the state level with the Industry-Education Council of California. The council generates ideas and maintains contact with many different groups and individuals. It's really a "tremendous dissemination network," Dr. Jacobsen says, tapping associations, local and state government agencies, community groups, advisory councils, and others concerned with business and industry and education.

The council's "implementing arms" are its 21 local industry-education councils scattered around the state. Because there are seven of these councils in the Los Angeles area, the Industry-Education Alliance of Los Angeles County, which Dr. Jacobsen heads, was set up as a regional council for this area.

The alliance focuses mainly on career education and economic education, on developing programs for all ages, kindergarteners through adults, and on changing education—but only as a cooperative effort of business and industry and the schools, Dr. Jacobsen says. "Business and industry should be instrumental in validating the curriculum and in making necessary changes," Dr. Jacobsen says. "Let's face it. The curriculum is bland, and industry can help spice it up."

What specific kinds of activities are industry-education councils involved in? A look at some of the major activities of the Los Angeles alliance will give some indication because Dr. Jacobsen notes that most of the local councils are moving in this direction. Here are some of things that the Los Angeles alliance has been doing:

- The alliance has held seminars and workshops, in conjunction with a state agency, on the structure and dynamics of the labor market. School counselors from Los Angeles County have attended.
- The alliance, with financial support and materials from an oil company, has obtained a simulation instructional unit on solving the problems of the energy crisis for use in the schools.
- The alliance is working with a consortium from the insurance field on infusing information about economics into the entire curriculum.
- Working with an economic advisory board representing several companies, the alliance is surveying schools to determine the strengths and weaknesses of economics education in the county.
- A "shadow intern" program takes university economics professors and matches them with a person in industry. The professors spend an intensive two weeks "shadowing" the industry person so that the professors will have a more realistic view of the economic process when they return to the classroom.
- A program in the Compton Unified School District is seeking to break the "third and fourth generation welfare syndrome" by focusing on the family. Because educators had found that any positive information about careers presented at school was at times being countered by a "negative welfare ethic" at home, they are working on career orientation and skill development on a family basis.
- The alliance acts as a liaison between businesses and schools on setting up experience-based programs, devising strategies for expanding "ma and pa type" stores, and on opening the doors for student interns.

Career Expo: Does the Carnival Approach Work? Different Approach Successful

There are two obvious ways to get students and employers together to talk about careers. The student can go to the employer, or the employer can come to the student. The Los Angeles Unified School District has tried both ways, and there is no doubt about its choice. "It is much, much better to send the student out in the community to talk to the employer; there's a world of difference," says Robert Sampieri, Coordinator of Comprehensive Career Education for the district.

In 1975 the district tried participating in a countywide Career Expo—a ten-day exhibition of careers at a central location. Employers set up booths, staffed them, and tried to replicate various careers on the spot and talk to passing students about them.

"We served about 125,000 kids, but the quality of contact was less than we thought it should be," Mr. Sampieri says. "It became apparent that there was no way you could have good communication between one electronic technician and 65 kids around a big booth. It's just not possible."

Consequently, district officials decided to take a different approach in 1976 to providing career information for students. First, working with the chamber of commerce, they scaled the project

down to involve only students in the Los Angeles city schools and in the parochial schools of the Los Angeles Archdiocese. Second, they sent the students out into the community to see the employers Students went in small groups and stayed for about four hours.

"The difference was magnificent," Mr. Sampieri says. "It was much more custom-designed, and there was such a difference in the quality of information the students received and in the relationship established between the students and the employers. And we were still able to serve 12,500 students on 386 different tours to 76 firms." In addition, he says, employers appreciated the fact that they did not have to pay to build a booth and to send someone out to staff it.

Chapter 10

Exemplary Practices – Evaluation

The decision to commit funds to evaluation is often difficult. There are usually other products and activities that are needed and no funds to buy them. So the temptation is great to spend more on curriculum development at the expense of evaluation.

Administrators of career education programs must remember, however, that evaluation is a vital and equal link in the chain that makes up the systems approach to career education and that no chain is stronger than its weakest link. Without evaluation a program will stagnate because there will be no way of knowing if objectives are being met or what kinds of changes should be considered to improve the job that is being done.

Evaluation is tied to a program's needs assessment and to the goals and objectives based on those needs. Evaluation measures the degree to which activities are successful in meeting those needs. To be most effective, evaluation must be considered during the initial stages of planning a program. It must be built into the project design—not whipped up right before a project ends. As the goals and objectives are being written and learner outcomes are being specified, project developers should decide how those outcomes will be measured. Because resources are limited, the objectives to be measured should reflect priority needs.

If this procedure is followed, evaluation is built in as an ongoing activity. It is the heart of a day-to-day attempt to refocus on career education and infuse it into the mainstream of education.

Evaluation is a systematic process of gathering data about programs, materials, and activities. It involves such basic questions as: What will be measured? Who will be measured? When will measurements be taken? How will the measurements be taken? By whom? How will the results be analyzed and used?

Evaluation does not assign good or bad ratings to people, techniques, or processes. It gives administrators information on which things are working and which things are not working so that changes can be made to improve the program. Thus, a major benefit of evaluation is that it provides management information for decision makers. It helps them make sound decisions on such matters as allocating staff time, funding curriculum development efforts, and using community resources.

Evaluation can lead to professional benefits by providing information that can be used in refining materials, improving instructional techniques, and increasing the use of educational technology. In addition, evaluation data can be used to justify increased appropriations and can lead to increased commitment by the school district governing board or the community.

Because most career education efforts are breaking new ground, there are few baseline measures of past performance to use for comparison except for pretests and other information collected at the beginning of a project. Therefore, it is even more necessary to have an ongoing evaluation plan that tests the knowledge, awareness, reactions, and attitudes of staff, students, parents, and community. Techniques that are used for the needs assessment also can be used for evaluation, such as interviews, attitude and reaction questionnaires, observations, simulation exercises, cognitive tests, sociometric ratings, and other indicators.

After evaluations are made, administrators should remember to report the findings to the school board; the public; advisory committees; participating business, state, and federal officials; and any others who should be informed about the effectiveness of career education.

Career Tests Evaluated in Regional Center Created by Legislature

When school district officials decide to test students, the toughest problem can be picking the right test from the hundreds that are available. Recognizing this difficulty, the California Pilot Career Guidance Center spent more than two years collecting, evaluating, and classifying tests.

The center has already evaluated 100 commercial tests and will evaluate more than 150 other commercial and noncommercial tests. This system for selecting career tests covers not only achievement tests but also aptitude tests, interest tests, personality tests, employment tests, and other kinds of tests. An annotation card prepared for each of the 100 tests evaluated spells out which kind of test it is.

The card also includes other information about the test to help school officials and teachers decide if this particular test would be useful to them. It includes such information as:

- Grade levels appropriate for the test
- Other tests in the series (if the test is part of a series)
- Other districts which have used the test so that they can share their experience, including any local norms, audiovisual materials, and so on, which might have been developed in connection with the test
- Ways in which the test corresponds with the California goals on career education (discussed in Chapter 2 of this publication)
- Ways in which the test relates to the four basic parts of career education: career awareness, exploration, preparation, and specialization in a career or career area
- Process for scoring and administering the test
- Data about the technical aspects of the test, including reliability, validity, norms, and so on
- Cost of the test and the parts of it which must be replaced before the test can be given a second time
- Time required for taking the test
- Any foreign language versions of the test

Although school districts can draw their own conclusions about a test after looking at all this information, the developers of the system also present their evaluation of the test. Each test is judged to be good, fair, or poor—a bold step which may irritate some commercial publishers.

This judgment is based primarily on technical information (reliability, validity, norms, and so on). The developers of the system also combed educational journals to see what test experts had to say about particular tests and took those judgments into consideration.

There is a second half to this project which is as big as the first part. The developers have also classified and evaluated 100 resource materials that could be used in the classroom. Each test card notes which resources complement each test.

The annotation cards on resources contain some of the same information found on the test cards, such as grade level, relationship to state goals, and so on. They also fully describe the resources, telling whether they are audiovisual aids, a print, a kit, a game, and so on. In addition, the annotation cards tell where the resource can be found; which curriculum area would be most appropriate for using it; whether it is for use with students, teachers, or parents; whether or not special equipment (such as a projector) is required; and how large or small the group should be for maximum benefit.

The resource materials are also rated as being either good, fair, or poor; however, these judgments were made in a different way. The materials were given to teachers who were paid to evaluate them by using them in the classroom or by judging them according to their experience with similar materials. The center staff combined their feelings about the materials with the judgments of the teachers to reach the final evaluation.

Most of the 100 resources already evaluated are commercial ones; however, the center has more than 150 other commercial and noncommercial resources which will be included later. The 100 annotation cards on tests and the 100 annotation cards on resources have been published in limited quantities by the center under the title *Career Tests and Resources*. It is expected that the cards will be made available nationally by a commercial publisher during 1976-77, according to James Brown, a guidance coordinator with the center who did most of the work in preparing the cards.

The cards will probably be published in a "needle-sort" format. This "poor man's computer" allows an individual to find immediately all the tests for a middle school, for example, by inserting a needle into a specific hole through an entire stack of cards. All those cards which remain on the needle when it is pulled out of the stack would relate to middle school tests. To find out which of these would test career awareness, for instance, the needle would be inserted into another hole. "This approach allows individuals to quickly reject inappropriate instruments and concentrate only on those appropriate to the goals of their career planning," center officials say.

The 200 tests and resource cards which have already been completed were distributed to school

districts in San Diego and Imperial counties in mid-1976. (These two counties are officially served by the regional center.)

To help other school districts take advantage of the center's work, the California State Department of Education has placed copies of *Career Tests and Resources* in the guidance divisions of all offices of county superintendents of schools, where they are available on loan. Copies can also be found in the Department's three vocational education regional offices and in selected regional occupational program centers.

The California Pilot Career Guidance Center, which is based in the Office of the San Diego County Superintendent of Schools, was created by the California Legislature as a regional experimental center which could be duplicated in other parts of the state.

Criterion-Referenced Test Used to Measure Career Awareness in San Bernardino

Officials in the San Bernardino City Unified School District wanted to know if their career awareness program in the elementary schools was successful. To find out, they asked a task force of elementary school teachers to develop a criterion-referenced test in career education for sixth graders. The teachers, who were familiar with the elementary instructional program, used the U.S. Office of Education's 15 career clusters and the Department of Education's ten goals of career education in developing the 50-item test.

The test was given in both English and Spanish for the first time in 1974-75 to establish baseline data. It was given again in 1975-76. Results show "a substantial increase in career awareness over a year ago," school officials say.

The results are shared with the 38 elementary school principals and their staffs so that they know where they stand in relation to the rest of the district. The cost for developing the test was $1,200.

Student Gains Confirmed by Learning Assessment System in Ceres

The Ceres Unified School District has been named by the U.S. Office of Education as an exemplary site for its comprehensive kindergarten through grade twelve career education model—a distinction that would never have been earned without a good evaluation system as part of the total program.

At the elementary level the method for monitoring student growth is known as the Ceres Learning Assessment System. Under the direction of career educational personnel, it involves a team approach, including the teacher, resource person, local administrator, and district curriculum specialist. A system is used to measure progress toward academic achievement goals.

To evaluate specific career education objectives which were being taught in the classroom, the project developed two instruments, a Primary Career Objectives Test and an Intermediate Career Objectives Test. Pretest and post-test differences disclosed that students achieved more, with results that are statistically significant at the .001 and .01 levels of confidence for the primary and intermediate levels, respectively. (At the .001 level there is only one chance in a thousand that the learning could have occurred by accident; at the .01 level, one chance in a hundred.)

Another objective of the assessment system was to find out if students in the program would score significantly higher on standardized reading and math tests than did students in a control group. Interestingly enough, the district goal of infusing career education into all aspects of elementary education was so successful and had such an impact that by 1974-75 the control groups essentially disappeared at some grade levels.

The percentage of students at or above grade level was the criterion used for comparing student performance between 1973-74 and 1974-75. The overall percentage increase for grades one through six was 12 percent in reading and 11 percent in math.

The 1974-75 results also provided substantial evidence that the program students scored significantly higher on standardized reading and math tests than did the control groups. First grade students in the experimental group exceeded those in the control group in reading at the .20 level of confidence. The difference in math was not significant. Experimental group students in the second grade exceeded control group students in reading at the .01 level; in math, at the .05 level.

At the fourth grade level, the mean raw scores and grade equivalents of the experimental group exceeded control group scores in the *CTBS* reading test, although the difference was not statistically significant for the middle socioeconomic group. The difference was significant at the .02 level for the lower socioeconomic group. Experimental group mean raw scores and grade equivalents exceeded control group scores in the *CTBS* math test at the .01 level of confidence for the middle

socioeconomic group and at the .01 level for the lower socioeconomic group.

Evaluation Aided by Private Third Parties

Sometimes it is helpful in evaluating a project to call on a third party, such as a private consulting firm or testing company. As outsiders they are in a position to look at a project with a different perspective.

Federal funding for career education research and demonstration programs, under the Vocational Education Act of 1968, parts C and D, allowed the state to contract with a third party agency to perform certain functions. The agency was assigned several different roles (auditor, monitor, consultant, and summarizer) at eight project sites in the state.

In the auditing role the agency was responsible for examining and verifying project accounts and evaluation data gathered by staff at the project site. Acting as monitors, staff members from the third party agency observed the activities of the various projects and considered whether required activities were being conducted.

Staff members from the third party acted as consultants, drawing on their experience and national perspective. They provided professional advice, particularly as they examined state project goals and suggested ways to improve the evaluation design for projects.

The investigators visited each of the eight sites four times during each funding year. They prepared internal evaluations and interim and final reports on project developments. The final reports included background information on each project; the manner in which it developed; and its objectives, components, and processes.

The contracts between the California State Department of Education and the external evaluators required each outside agency to perform eight specific tasks. Each outside agency was asked to:

- Analyze and describe the accomplishments of the local program by reviewing program documents and consulting with the local staff and with Department of Education staff.
- Determine whether there was consistency between a local project's needs assessment, initial project proposal, goals and objectives, planning, and development.
- Recommend functions, responsibilities, and time lines for accomplishing the goals.
- Analyze the plans for the local program to see if they are in agreement with the California Career Development Model.
- Help in developing a system for collecting and analyzing data so that projects can be evaluated as they are developed.
- Consult with all the members of a local school district involved in a project to be sure there are no misunderstandings about the local goals and objectives and the process that will be used for meeting these goals.
- Review or develop tests or other means of assessing the expected outcomes.
- Prepare a report summarizing the planning development and staff development at the end of the first year.

Acknowledgments

The Career Education Unit is grateful to all those individuals and school districts that took time to contribute reports about their activities. Their willingness to participate is sincerely appreciated. Our thanks go to:

California Pilot Career Guidance Center–James Brown and Jerry Miller
Camino Union Elementary School District–Wallace Thomas
Ceres Unified School District–John Avila, Eldon De Witt, William Green, Marilyn Hildebrandt, Bernie Knoll, and Virginia Lish
Chaffey Union High School District–Mary Jo Kohler
Covina-Valley Unified School District–Martha Evans, Ragene Farris, Thomas Smith, and Vincent Van Detta
Davis Joint Unified School District–Don Dachner
Grossmont Union High School District–Thomas Jacobson
Industry-Education Alliance of Los Angeles County–Kaare Jacobsen
Irvine Unified School District–James Chapman
La Mesa-Spring Valley Elementary School District–Linda Cole, Martin Gerstein, and Bill Pitts
Los Angeles City College–Robert Pollyea
Los Angeles Unified School District–Robert Sampieri
Monterey Peninsula Community College District–Marshall Chatwin
Office of the San Bernardino County Superintendent of Schools–Vernon Crear
Ontario-Montclair Elementary School District–Norman Steinaker
Orange Unified School District–Jack Sappington
Rancho Santiago Community College District–Donna Farmer
Richmond Unified School District–Earle Carr and Julian Lyons
San Bernardino City Unified School District–Ralph O'Brien
San Diego City Unified School District–Chris Chialtas, Ronald Detrick, and Barbara Thomas
Santa Ana Unified School District–Larry Johnson
Santa Barbara City High School District–Charles Brady
Simi Valley Unified School District–Chester Howe
South San Francisco Unified School District–Patrick Cannon and Louis Goins

76-89 (03-1096) 89442–300 4-77 2M